LIBRARY

LIBRARY

BOROUGH OF TORQUAY.

ANNUAL REPORT

OF THE

Medical Officer of Health

for 1937.

PRINTERS & BOOKBINDERS
THE TORQUAY PUBLISHING CO. LTD
FLEET STREET TORQUAY

BOROUGH OF TORQUAY.

ANNUAL REPORT

OF THE

Medical Officer of Health

for 1937.

Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

https://archive.org/details/b30191014

TABLE OF CONTENTS.

	Page
Introduction	5
Staff	8
Section A. Statistics and Social Conditions of the Area.	
Area, Population, Rateable value	10
Physical Features and Climate	10
The Medical Baths	12
Social Conditions	14
Extracts from Vital Statistics	15
Marriage-rate, birth-rate, death-rate, infant mortality	16
Section B. General Provision of Health Services for the Area.	
Staff	26
Laboratory facilities	26
Ambulance facilities	27
Nursing in the Home	27
Treatment Centres and Clinics	28
Hospitals	29
Midwifery and Maternity Services	29
Institutional Provision for Mothers or Children	40
Health Visitors	40
Child Life Protection	41
Orthopaedic Treatment	42
Registration of Nursing Homes	43
Section C. Sanitary Circumstances of the Area.	
Water	44
Drainage and Sewerage	45
Rivers and Streams	45
Closet Accommodation	45
Public Cleansing	46
Sanitary Inspection of the Area	46
Shops	52
Smoke Abatement	52
Swimming Baths and Pools	52
Eradication of Bed Bugs	53
Schools	54
Section D. Housing.	
Inspection	55
Remedying of defects	56
Action under statutory powers	56
Overcrowding	59

Section E. Inspection and Supervision of Food.

Milk Supply	63
Meat and other foods	69
Adulteration of food	75
Chemical and bacteriological examination of food	76
Nutrition	76
Shell-fish (Molluscan)	76

Section F. Prevalence of, and Control over, Infectious and Other Diseases.

Notifiable Diseases	77
Isolation Hospital Treatment	84
Vaccination and Immunisation	85
Prevention of Blindness	86
Tuberculosis	87
Disinfection	88

Section G. Report of Riparian Authority.

Shipping entering the port	91
Character of Trade of the port	92
Water Supply	92
Port Sanitary Regulations 1933	93
Measures against Rodents	96
Hygiene of Crews' spaces	99
Food Inspections	99

Section H. Miscellaneous.

Superannuation Act	101
Air Raid Precautions—Medical Section ...	101

Meteorological Chart

TOWN HALL,
TORQUAY.

To the Worshipful the Mayor and to the Aldermen and Councillors of the Borough of Torquay.

MR. MAYOR, LADIES AND GENTLEMEN,

I have the honour to submit my Annual Report for 1937, which is detailed in form and sequence in accordance with the instructions of the Minister of Health.

Continued prominence has rightly been given to all measures for improving national physique, and a campaign was inaugurated throughout the Country for a fuller utilisation of the Health Services. This is most opportune; for the pioneers of earlier days concentrated upon the general principles of sanitation and have given us as an invaluable heritage conditions of healthy living. But that is not enough; because public health must include personal health, and the ultimate success of preventive medicine, dependent as it is on many factors, can only be finally achieved by individual effort on the part of every citizen. And the comprehensive use of the facilities offered by the health services and by the medical profession in the prevention and treatment of disease must be complementary to the more positive efforts of physical education and of physical culture.

The aim of such physical education is to obtain and to maintain the best possible development and functioning of the body and thereby to aid the development of mental capacity and of character. And in this broad scheme for better health, Torquay has an especially important contribution to make, both to its residents and to the innumerable visitors who come throughout the year to seek re-creation and re-invigoration by sun, air and sea. For in a marine health resort all the features of a hygienic way of life can be learned and practised in a pleasant way.

In the year under review, notable advances were made in Maternity and Child Welfare; the scheme prepared under the Midwives Act was inaugurated which secures the organisation of a domiciliary service of midwives under the control of the

Local Authority. In addition to the existing ante-natal clinic at the Hospital, a post-natal clinic with facilities for gynæcological treatment was established; and the provision of a general practitioner's section of ante-natal and of post-natal services was also arranged. Moreover, the provision of beds for ante-natal cases requiring in-patient treatment at Hospital was approved; and an emergency unit is now available for any domiciliary case which may be too ill to move to an institution. The dental scheme has been extended and a system of home helps established.

The arrangements for the supply of milk to mothers and children under five years of age were reviewed, and a new scheme approved embodying extensions; this is particularly to be welcomed because it is vitally important to ensure that there is available for every individual an adequate provision of milk, aptly described as the key of nutrition—indeed no other single measure has such a beneficial effect upon the development, health, and resistance to disease of the people, especially of the younger generation. Nutrition must always occupy a prominent place in public health, and it is not too much to say that if we could sufficiently obtain the necessary increased consumption of safe milk and of protective foods throughout the nation, we should be on the eve of a most dramatic social reform of incalculable value.

Further progress was continued in Housing; a number of cases of overcrowding were abated by the provision of Corporation houses with an adequate number of bedrooms, and the new estate at Watcombe was laid out in readiness for the erection of 188 houses which are to be built forthwith. But houses alone are not sufficient; for the houses must be turned into homes, and provision made for the social life, recreative needs and welfare of the residents. And it is gratifying to record that a Community Centre is now to be built at Hele and that provision is made for another to be erected on the Watcombe Estate as soon as it is required. The place of a community centre is indispensable in modern life to enable people to spend their spare time to a double useful purpose—useful to themselves as individuals and useful to the Town by developing a spirit of mutual understanding and tolerance.

On the whole the year was comparatively healthy and free from very exceptional influences; the influenza outbreak in the early months was characterised by widespread incidence rather than by severity of type, and it had no appreciable effect on the death-rate. In the autumn a small outbreak of acute poliomyelitis (infantile paralysis) occurred in various parts of the county in which Torquay shared; only four cases were notified in the Borough, three of these being non-residents, although the type was unfortunately severe.

These are some of the outstanding features of the year's record, and the growing volume of routine work in all its manifold aspects is detailed in the body of the report; and it will be seen that the maintenance of public health and the promotion of national fitness are subjects of widening importance. There are many problems yet to solve, which require patient constant work and unwearied vigilance, for there are no short cuts to success:

"Let no man think that sudden in a minute
All is accomplished and the work is done;—
Though with thine earliest dawn thou shouldst begin it
Scarce were it ended in thy setting sun."

In conclusion, it is with appreciation that I acknowledge the co-operation and spirit of mutual helpfulness of the Medical Profession of the Borough, both individually in the many contacts of daily work, and collectively through the local Division of the British Medical Association.

I also acknowledge with gratitude both the encouraging support given to me by the Chairman and Members of the Public Health Committee, and the loyal co-operation of every Member of the Staff; for upon these factors depends the continued march of progress towards the victories that are yet to come.

I have the honour to be,

Your obedient Servant,

J. V. A. SIMPSON.

STAFF.

(a) Medical

Medical Officer of Health, School Medical Officer and Medical Superintendent of Isolation Hospital.

J. V. A. SIMPSON,
M.D.LOND., B.S., M.R.C.S., L.R.C.P., D.P.H.CAMB.

Deputy Medical Officer of Health and Assistant School Medical Officer.

L. G. ANDERSON, M.D.LIVERP., CH.B., D.P.H.LIVERP.

Medical Officer, Ante-Natal Clinic and Post-Natal Clinic.

†P. A. McCALLUM, M.B.GLASG., CH.B., D P.H.CAMB.

Obstetric Consultants.

†P. A. McCALLUM, M.B.GLASG., CH.B., D.P.H.CAMB.
†B. VENN DUNN, M.D.ED., F.R.C.S.ED.

Ophthalmic Surgeon (School Medical Service and Maternity and Child Welfare).

†J. MASTERTON THOMSON, M B.GLASG., CH.B., D.O.M.S.ENG.

Pathologist and Bacteriologist.

†H. A. FIELDEN, M.D.DURH.

(b) Dental

School Dental Officer and Dental Officer for Maternity and Child Welfare.

N. HARRIS, L D S., R.C.S.ENG.

(c) Nursing

Health Visitors, Child Protection Visitors.

Miss K. M. MILBURN, S.R.N., S.C.M., H.V.CERT.R.S.I. (Resigned on account of ill-health, 26/10/37).

*Miss I. P. RANDOLPH, S.R.N., S.C.M., H.V.CERT.R.S.I. (Resigned 31/5/37).

*Miss P. MULLINEAUX, S.R.N., S.C.M., H.V.CERT.R.S.I.

*Miss M. E. CARTER, S.R.N., S.C.M., H.V.CERT.R.S.I.

(Vacancy—Appointment pending)

Matron, Isolation Hospital.

Miss M. J. STEWART, S.R.N.

(The staff at the Isolation Hospital includes the Matron, three nurses and three probationers)

(†) Part Time. (*) Also a School Nurse.

(d) Sanitary

Chief Sanitary Inspector.

G. E. BODY, C.R.S.I. and Meat Cert.

District Sanitary Inspectors.

G. J. LOVELESS, C.R.S.I. and Meat Cert.
A. THOMPSON, C R S.I.
J. F. H. SMITH, C.R.S.I. and Meat Cert.
H. T. BEECHEY, C.R.S.I. and Meat Cert.

(e) Other

Orthoptist (School Medical Service and Maternity and Child Welfare)

†Mrs. C. GRUGEON.

Borough Meteorologist.

†C. BELLINGER, F.R.MET.S.

Veterinary Surgeon.

†C. MASSON, M.R.C.V.S.

Clerks.

(*Public Health Department*)—W. H. NICKELS, P. H. BURGE, W. D. WHITE.

(*Maternity and Child Welfare*)—Miss K. HUDSON, †Mrs. V. KNAPMAN.

(†) Part Time.

SECTION A.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (in acres) - - -	6,244
Registrar-General's estimate of resident population, mid-1937 - - -	44,630
Number of inhabited houses (end of 1937) according to Rate Books - -	12,247
Rateable Value (end of 1937) - -	£524,312
Sum represented by a Penny Rate (1937-38) -	£2,057

PHYSICAL FEATURES AND CLIMATE.

Torquay is recognised as one of the most beautiful marine resorts in Britain; it enjoys a very sheltered position upon the coast and its reputation as a health resort is due to its equable climate. Originally built under the shelter of the hills which encircle the eastern end of Torbay, its boundaries have gradually extended over the crest of the hills to more bracing sites up to 500 feet above sea level; this affords great variety and choice of climate according to the elevation and exposure that may be selected.

The soil is mainly derived from limestone, red sandstone and grit; the sub-soil is composed of disintegrated portions of limestone grit and igneous rocks. The generally faulted nature of the rock and the fissures in the limestone allow of quick drainage, which is further helped by the undulating nature of the surface. Clay is almost absent, only small pockets of sandy clay being found in a few valleys and depressions.

The climate is characterised by a low mean daily range of temperature, by abundant sunshine with a high percentage of physiologically active ultra-violet rays, by moderate rainfall, by low humidity and by a dry soil. The mean annual temperature of the sea is 55 deg. F., and the shelter of the hills gives protection from northerly and easterly winds.

The air is pure, there being no factories to cause any pollution; fogs are extremely rare and sea fogs are only occasional. The temperature averages show very mild

conditions (a mean temperature of 57.4 deg. F. in Summer and of 44.5 deg. F. in Winter), with a small daily range of only 9.5 deg. F. in the Winter and of 11 deg. F. for the whole year. Rainfall averages 33 inches a year but the number of rain days is not high, and 63 per cent. of the rain falls between 6 p.m. and 8 a.m. Much of the rain is sub-tropical in nature, a large amount falling in a few hours; and this, associated with the sub-soil, tends to atmospheric purity. The relative humidity is about 78 per cent., being higher in Winter than in Summer, which assists in maintaining the mild and equable conditions. The sunshine averages 1,800 hours a year; and the Winter sunshine is about 29 per cent. of the possible, which is a high figure for this country. The ultra-violet rays are high, daily measurements having been carried out for ten years; in addition to the rays directly from the sun and reflected from the sky as "sky-shine," there is at a seaside resort the extra amount due to reflection from the sea—a fact which was first proved by me at Torquay. The biologically active rays (about 300 uu.) are plentiful and are shown by the difference between the quartz tube reading and the glass tube reading, both of which are measured daily in Torquay.

The following is a summary supplied by the Borough Meteorologist of the climatic conditions for 1937, which are illustrated by a chart at the end of the Report; and acknowledgment is made to Dr. W. G. Willoughby, Medical Officer of Health, Eastbourne, for his kindness in allowing the use of his chart, which has been a feature of the Eastbourne Annual Report for over 40 years.

	1937	Average 1911-1937
Mean maximum temperature	57.5 deg. F.	57.4 deg. F.
Highest shade temperature	79.0 „	—
Mean minimum temperature	46.1 „	46.4 „
Lowest shade temperature	27.0 „	—
Mean temperature	51.8 „	51.9 „
Mean range of temperature	11.4 „	11.0 „
Total rainfall	41.04 inches	35.54 inches
Number of days on which rain fell	176	174
Number of days on which a trace only was recorded	50	—
Mean humidity (percentage)	77	78
Hours of bright sunshine	1653.8	1743.86
Number of sunny days	299	—
Mean ozone (percentage)	35%	—
Prevailing winds	N.W., W.S.W., S.E., W., W.N.W.	
Mean daily units of ultra-violet rays	3.24	

The type of person for whom the climate is especially suitable is the case in which it is desired that life shall be rendered as easy as possible, expenditure of energy reduced to a minimum and opportunity given for accumulating reserves upon which to draw in time of stress or effort. The inherently delicate, the elderly, young children and the convalescent all derive great benefit: the climate also suits persons who have returned from the tropics and those who require sedative effects after residence in more northerly climates or after the strain of modern business life and an exacting complex civilization.

The soft air and freedom from dust are eminently suitable for persons suffering from irritable throats, catarrhal infections, chronic bronchitis or other affections of the respiratory system. In addition, patients suffering from nephritis or with degenerative changes of the circulatory system, appreciate the absence of cold and are thereby enabled to spend the winter months in comparative comfort; and cases of functional or organic diseases of the nervous system usually derive great benefit from the soothing influences of the climate and its surroundings. Rheumatic conditions also do well in Torquay, with the dual advantages of climate and of balneological facilities.

The Medical Baths.

From the balneological aspect it is recognised that a well-equipped baths establishment is a real asset to a health resort; and as Dr. Fortescue Fox said, "The marine health resort is the place *par excellence* for physical treatment, that is to say, for the scientific use and combination of physical energies operating on the surface of the body." Torquay is fortunate in possessing a thoroughly up-to-date establishment, which is under the control of the Corporation. The equipment is modern, and most of the baths, douches and accessory treatments which have the support of medical hydrologists are available, treatments being given (with a few simple exceptions) only on medical prescription. There is a large cooling lounge in addition to the requisite number of dressing and resting rooms; and attached to the Medical Baths there is a large vita-glass sun lounge

facing South. Owing to the favourable climatic conditions baths can be taken in Torquay at all seasons, which is a great advantage to invalids during the winter months.

Fully certified attendants, holding the C.S.M.M.G. and Bio-physical qualifications, are retained upon the staff. The chief forms of treatment in the Medical Section are

(*a*) *Balneological:* Aix and Vichy Douches, Spray Douches, Needle Baths, Sea Water Baths, Torbay Seaweed Baths, Plombières, Nauheim Baths, Pine Baths, etc.

(*b*) *Electrical:* Radiant heat, diathermy, high frequency, galvanic, faradic and sinusoidal currents, ionisation, infra-red and ultra-violet radiation.

(*c*) *Accessory:* Dartmoor peat packs, paraffin wax, massage and exercises.

Torquay Natural Mineral Water.

The source of this water is the Meadfoot Spring, owned by the Torquay Corporation, and it is derived from the lower Devonian grits and shales. It is a natural cold water of the highest degree of organic and bacterial purity, belonging to the same class as Evian and Vittel Drinking Waters. The water is carefully bottled at the spring.

Samples of the water have been analysed by S. Judd Lewis, D.Sc. (Tubingen), D.Sc. (Lond.), F.I.C., Ph.C., in accordance with the Approved Directions given in the "International Register of Spas and Medicinal Waters," issued by the International Society of Medical Hydrology in 1931.

Classification of the water (International Standard Measurements)—

Chemical Composition	Magnesium, Calcium, Bicarbonate
Ionic Concentration	N/1000, Total=28. Mg. 6.0. Ca 5.5. HCO_3 7.9.
Reaction - -	Normal; pH = 7.6.
Physical - -	Cold, 54 deg. F.; hypotonic
Medicinal - -	Diuretic and Alterative
Indications - -	Bladder and Urinary Conditions Gastro-Intestinal Disorders, Rheumatism, Gout and Metabolic Disturbances.

The Vita-Glass Sun Lounge.

It may be claimed that the special features of this Lounge place it amongst the finest of its type to be found anywhere; the view from the interior embraces the whole of Torbay with its excellent coast line, and the situation provides an ideally restful atmosphere away from the noise of all traffic. It is 200 feet in length, partly built on rock and partly cantilevered over the sea, and all the windows are fitted with vita-glass, allowing penetration of ultra-violet rays which have been measured by the acetone-blue gauge. The heating system for the cooler months of the year is installed on the thermostatic control principle; and for warmer days there is adequate ventilation, the air movement being periodically assessed by the kata-thermometer.

Social Conditions

including the chief industries carried on in the area and the extent of unemployment.

Torquay is a residential town and health resort, and there are no factories or industries. In addition to the villa residents there are a number of hotels and boarding houses, such as befit a modern health resort to accommodate the many visitors who seek recreation during a change of air after illness or during the annual holiday after the stress of work.

Much of the employment of the working classes is regular, but a certain amount has a seasonal variation.

The following figures were kindly supplied by the Manager of the Ministry of Labour Employment Exchange and show the seasonal variation; the extent of unemployment is given for January (1937 and 1938) when it is probably highest, and in July (1937) when it is probably lowest:—

	Men	Women	Boys	Girls	Total
January, 1937	1157	316	68	105	1646
July, 1937	674	82	39	27	822
January, 1938	1194	351	130	160	1835

Extracts from Vital Statistics of the Year,

which relate to the net births and deaths after correction for inward and outward transfers as furnished by the Registrar-General.

		Total	Males	Females		
Live Births	Legitimate	463	238	225	Birth-rate per 1,000 of the estimated resident population	11.4
	Illegitimate	44	25	19		
Stillbirths	- -	25	14	11	Rate per 1,000 total (live and still) births	47.0
Deaths	- -	664	319	345	Death-rate per 1,000 of the estimated resident population	14.9

Deaths from puerperal causes (Headings 29 and 30 of the Registrar-General's Short List) :—

		Deaths	Rate per 1,000 total (live and still) births
No. 29	Puerperal sepsis -	1	1.88
No. 30	Other puerperal causes -	2	3.76
Total	- - - -	3	5.64

Death-rate of infants under one year of age :—

All infants per 1,000 live births - -	45.3
Legitimate infants per 1,000 legitimate live births	43.2
Illegitimate infants per 1,000 illegitimate live births	68.2

Deaths from	Cancer (all ages) - - -	110
,,	Measles (all ages) - - -	0
,,	Whooping Cough (all ages) - -	3
,,	Diarrhœa (under two years of age) -	0

Particulars of any unusual or excessive mortality during the year which has received or required special comment.

During the year there has been no unusual or excessive mortality.

Any causes of sickness or invalidity which have been specially noteworthy during the year ; any conditions of occupation or environment which appear to have had a prejudicial effect on health ; and any evidence, statistical or otherwise, that unemployment has exercised any significant influence on the health or physique of children or adults.

There have been no noteworthy conditions upon which to report under this section. It is difficult to obtain *evidence* of the influence of unemployment on the health or physique of adults ; but in the case of children in Torquay it can be stated that there has been no deleterious effect on nutrition. From the annual reports of the School Medical Officer it is seen that the number of cases of malnutrition have not

increased during the past ten or twelve years. Many of these cases arise as the result of unsatisfactory home management, and all cases found are sent to the open-air school, where the restoration to good nutrition and efficient physique is speedily obtained. The open-air school has, fortunately, a satisfactory proportion of places to the total elementary school population compared with many other areas.

Population.

The supplementary County Census Volume recently issued gives the revised particulars affecting districts which have been altered between 26th April, 1931, and 30th June, 1935. The area of Torquay was increased on 1st April, 1935, from 5,377 acres to 6,244 acres, the 867 acres being transferred from the Newton Abbot R.D.; the census population of 46,165 was increased by this transfer to the extent of 187 persons, making a new total of 46,352.

The age and sex distributions given show that there were 19,471 males and 26,881 females; of these 39 per cent. of the total, 7,040 males and 10,999 females were over 45 years of age, and there were only 5,173 married women between 15 and 44 years.

The deaths exceed the births in the Borough and in the intercensal period the percentage decrease from this was—1.0, but migration amounts to 17.3 per cent., and this gives a net increase in population of +16.3 per cent.

The Registrar-General's estimate for the population at the middle of 1937 is 44,630: this figure is used in calculating the marriage-rate, birth-rate, death-rate and other statistical returns.

Marriages.

There were 234 marriages registered in 1937 and the marriage-rate was 5.2 per 1,000 population; the marriage-rate for England and Wales was 17.4. The exceptional character of Torquay, with the numerous residents who come to spend their retirement here, explains the low Torquay rate.

Births.

The number of live births registered during the year, corrected for transfers, is 507, of which 263 were male and 244 female; there were 463 legitimate births and there were 44 (8.7 per cent.) illegitimate births. There were 25 still-births registered, 23 legitimate and 2 illegitimate.

The birth-rate was 11.4 per 1,000 population compared with 12.1 in 1936, the rate for England and Wales in 1937 being 14.9, and for the 148 small towns 15.3. The stillbirth-rate was 0.56 per 1,000 population compared with a rate of 0.60 for England and Wales, the rate for the small towns being 0.64. The stillbirth-rate per 1,000 total (live and still) births was 47, compared with 39 for England and Wales.

The birth-rate in Torquay is low because of the age and sex distribution of the population; out of the total population there are only 5,173 married women between 15 and 44 years of age.

The ward distribution *as given by the Local Registrar*, (i.e., without correction for transfers) is :—

	Males	Females	Illegitimate
Torre	36	35	8
Waldon ..	26	20	3
Upton	36	40	4
Ellacombe ..	43	26	4
Strand	15	17	3
Torwood ..	7	10	1
St. Marychurch ..	52	54	8
Babbacombe ..	19	14	3
Chelston ..	46	49	4
Totals ..	280	265	38

Notification of Births Act.

During the year the number of births (adjusted by transfers) *notified to the Medical Officer of Health*, was 519, of which 468 were notified by midwives and 51 by parents and doctors; there were 495 notifications of live births and 24 notifications of stillbirths.

Deaths.

The total number of deaths registered in the Borough in 1937 was 680; of these 114 were non-residents and were transferred to their own districts, while inward transfers numbered 98. The net total is 664, 319 being males and 345 females.

The crude death-rate is 14.9 per 1,000 population compared with 14.5 in 1936; the death-rate for England and Wales in 1937 was 12.4 and the rate for 148 smaller towns (with population from 25,000 to 50,000) was 11.9. In order to make adjustments for the age and sex distributions of Torquay, the Registrar-General supplies an "areal comparability factor" (A.C.F.) with which to multiply the local crude death-rate; this A.C.F. for Torquay in 1937 was 0.76 and gives an adjusted local death-rate of 11.3.

The age distribution of the deaths is shown by the adjoining table, which includes the previous year:—

Age group	1936	1937
Under 1 year - -	28	23
1 and under 2 - -	1	5
2 and under 5 - -	4	2
5 and under 15 - -	7	4
15 and under 25 - -	14	15
25 and under 45 - -	39	46
45 and under 65 - -	167	157
65 and upwards - -	390	412
Total Deaths (all ages) -	650	664
Death-rates - -	14.5	14.9

The ward distribution of deaths was:—

Ward	Deaths at all ages	Under 1 year	Inquests	Uncertified
Torre	77	3	6	-
Waldon	60	2	2	-
Upton	88	3	2	1
Ellacombe	100	4	3	-
Strand	41	1	3	1
Torwood	54	-	1	1
St. Mary-Church ..	92	7	2	1
Babbacombe ..	77	3	6	-
Chelston	75	-	3	-
Totals ..	664	23	28	4

The Zymotic death-rate during the year was 0.13; this is the rate due to small-pox, measles, whooping cough, scarlet fever, diphtheria, enteric fever, and diarrhœa under two years of age. The four previous years are included for comparison.

Death from:		1933	1934	1935	1936	1937
Smallpox	-	—	—	—	—	—
Measles	-	—	—	4	—	—
Whooping cough	-	—	1	1	—	3
Scarlet fever	-	—	1	—	—	—
Diphtheria	-	5	1	1	2	3
Enteric, etc., fever	-	1	—	—	—	—
Diarrhœa (under 2 years	-	2	3	1	2	—
Zymotic death-rate	-	0.18	0.13	0.15	0.09	0.13

The causes of death are given in this table supplied by the Registrar-General :—

	Causes of Death		Males	Females
	All Causes		319	345
1	Typhoid and Paratyphoid Fevers		-	-
2	Measles		-	-
3	Scarlet Fever		-	-
4	Whooping Cough		2	1
5	Diphtheria		2	1
6	Influenza		2	12
7	Encephalitis Lethargica		1	-
8	Cerebro-spinal Fever		-	-
9	Tuberculosis of Respiratory System		13	13
10	Other Tuberculous Diseases		3	3
11	Syphilis		-	-
12	General Paralysis of the Insane, Tabes Dorsalis			-
13	Cancer, Malignant Disease		42	68
14	Diabetes		3	9
15	Cerebral Hæmorrhage, etc.		18	20
16	Heart Disease		91	80
17	Aneurysm		-	-
18	Other Circulatory Diseases		26	37
19	Bronchitis		9	8
20	Pneumonia (all forms)		19	18
21	Other Respiratory Disease..		2	3
22	Peptic Ulcer		5	-
23	Diarrhœa, etc. (under 2 years)		-	-
24	Appendicitis		3	-
25	Cirrhosis of Liver		1	1
26	Other Diseases of Liver, etc.		3	3
27	Other Digestive Diseases		11	12
28	Acute and Chronic Nephritis		12	9
29	Puerperal Sepsis		-	1
30	Other Puerperal Causes		-	2
31	Congenital Debility, Premature Birth, Malformations, etc.		10	6
32	Senility		1	6
33	Suicide		4	1
34	Other Violence		13	9
35	Other Defined Causes		22	22
36	Causes Ill-defined or Unknown		1	-
	Special Causes (included in No. 35 above)			
	Smallpox		-	-
	Poliomyelitis		1	-
	Polioencephalitis		-	-
	Deaths of Infants under 1 year	Total	14	9
		Legitimate	11	9
		Illegitimate	3	-
	Stillbirths	Total	14	11
		Legitimate	13	10
		Illegitimate	1	1

The following table gives the birth-rates, death-rates, an analysis of mortality, maternal death-rates, and case-rates for certain infectious diseases in 1937 ; the rates are for England and Wales, for 125 County Boroughs and Great Towns, for 148 Smaller Towns, for London and for Torquay to show the comparison :—

Birth-rates, Death-rates, Analysis of Mortality, Maternal Death-rates. and Case-rates for certain Infectious Diseases in the year 1937.

England and Wales, London, 125 Great Towns, 148 Smaller Towns, and Torquay.

(Provisional Figures based on Weekly and Quarterly Returns).

	Torquay	England and Wales	125 County Boro's and Great Towns including London	148 Smaller Towns (Resident Populations 25,000 to 50,000 at 1931 Census)	London Administrative County
	Rates per 1,000 Population				
BIRTHS:					
Live ..	11. 4	14. 9	14. 9	15. 3	13. 3
Still ..	0.56	0.60	0.67	0.64	0.54
DEATHS:					
All Causes ..	14. 9	12. 4	12. 5	11. 9	12. 3
Typhoid and Paratyphoid fevers..	0.00	0.00	0.01	0.00	0 00
Smallpox ..	—	—	—	—	—
Measles ..	0.00	0.02	0.03	0 02	0.01
Scarlet fever ..	0.00	0.01	0.01	0.01	0.01
Whooping cough ..	0.07	0.04	0.04	0.03	0.06
Diphtheria ..	0.07	0.07	0.08	0 05	0.05
Influenza ..	0.31	0.45	0.39	0.42	0.38
Violence ..	0.61	0.54	0.45	0.42	0 51
NOTIFICATIONS:					
Smallpox ..	0.00	0.00	—	0.00	—
Scarlet fever ..	2.04	2.33	2.56	2.42	2.09
Diphtheria ..	0.78	1.49	1.81	1.38	1.93
Enteric fever ..	0.07	0.05	0.06	0.04	0.05
Erysipelas ..	0.16	0.37	0.43	0.34	0.44
Pneumonia ..	0.78	1.36	1.58	1.20	1.18
	Rates per 1,000 Live Births				
Deaths under 1 year of age	45	58	62	55	60
Deaths from Diarrhœa and Enteritis under 2 years of age ..	0.0	5. 8	7. 9	3. 2	12. 0
MATERNAL MORTALITY:					
Puerperal Sepsis ..	1.98	0.97	Not available		
Others ..	3.95	2.26			
Total ..	5.92	3.23			
	Rates per 1,000 Total Births (*i.e.* Live and Still)				
MATERNAL MORTALITY:					
Puerperal Sepsis ..	1.88	0.94	Not available		
Others ..	3.76	2.17			
Total ..	5.64	3.11			
NOTIFICATIONS:					
Puerperal fever .	24.43	13.93	17.59	11.52	4.15
Puerperal pyrexia ..					14.34

The chief causes of death in Torquay will be seen to have been (1) Heart disease, (2) Cancer, (3) Other circulatory diseases.

Cancer.

There were 110 deaths registered from cancer, and the age and sex distribution was :—

Age Group	Under 30	30-35	35-45	45-55	55-65	65-75	75 and over	Total
Males	—	1	1	—	9	17	14	42
Females	—	—	—	14	12	23	19	68
Totals	—	1	1	14	21	40	33	110

The death-rate from cancer is 2,465 per million population, compared with 1,632 per million for England and Wales ; and the high rate is accounted for by the age-distribution of the population, 39 per cent. (7,040 males and 10,999 females) being over 45 years of age.

Infant Mortality.

There were 23 deaths in infants under one year of age, which gives an infant mortality-rate of 45 per 1,000 live births ; the rate for England and Wales was 58, and the rate for the small towns was 55.

In the statistical review of the Registrar-General for 1935 it is suggested " that it ought to be possible for every northern town to achieve a rate below 50 and for every other town a rate below 40." The average infant mortality-rate for the last five years in Torquay was 47.

The following tables are of interest :—

BIRTHS, INFANT DEATHS AND INFANT MORTALITY FOR A SERIES OF FIVE YEARS

Year	Total Births recorded	Deaths of Infants under 1 year	Infant Mortality for Torquay	Infant Mortality for England and Wales
1933	529	26	49	64
1934	493	24	48	59
1935	535	21	39	47
1936	543	28	52	59
1937	507	23	45	58

PRINCIPAL CAUSES OF DEATHS AMONG INFANTS

	1937	1936	1935	1934	1933
Measles - -	—	—	—	—	—
Whooping Cough - -	—	—	—	1	—
Influenza - -	1	—	—	—	—
Diarrhœa - -	—	2	1	2	2
Tuberculous diseases -	1	—	—	—	2
Bronchitis - -	2	3	—	—	1
Pneumonia - -	2	5	1	7	4
Premature births / Congenital defects -	13	14	12	14	14
Other defined causes - -	3	3	5	—	1
All other causes - -	1	1	2	—	2
	—	—	—	—	—
	23	28	21	24	26

It is seen that the infant mortality-rate is approaching what is (until further research can elucidate the factors involved), an irreducible minimum ; the main causes of death are under the headings congenital defects and prematurity, which are but little influenced by preventive measures.

This is, however, all the more reason why every effort should be made to maintain all the available facilities for keeping the mortality-rate as low as possible.

Exact details of the causes of death are given in this table :—

INFANT MORTALITY DURING 1937.

CAUSES OF DEATH.		Under 1 Week.	1—2 Weeks.	2—3 Weeks.	3—4 Weeks	Total under 1 Month.	1—3 Months.	3—6 Months.	6—9 Months.	9—12 Months	Total Deaths
ALL CAUSES.	Certified ..	14	-	1	-	15	4	1	-	3	23
	Uncertified ..	-	-	-	-	-	-	-	-	-	-
Measles		-	-	-	-	-	-	-	-	-	-
Whooping cough ..		-	-	-	-	-	-	-	-	-	-
Diphtheria		-	-	-	-	-	-	-	-	-	-
Influenza		1	-	-	-	1	-	-	-	-	1
Tuberculosis of nervous system ..		-	-	-	-	-	-	-	-	-	-
Tuberculosis of intestines and peritoneum ..		-	-	-	-	-	-	-	-	-	-
Other Tuberculous diseases		-	-	-	-	-	-	-	-	1	1
Syphilis		-	-	-	-	-	-	-	-	-	-
Meningitis		-	-	-	-	-	-	-	-	-	-
Convulsions		-	-	-	-	-	-	-	-	-	-
Bronchitis		-	-	-	-	-	2	-	-	-	2
Pneumonia ..		-	-	-	-	-	-	-	-	2	2
Other respiratory diseases		-	-	-	-	-	-	-	-	-	-
Inflammation of stomach		-	-	-	-	-	-	-	-	-	-
Diarrhœa and enteritis ..		-	-	-	-	-	-	-	-	-	-
Hernia, intestinal obstruction ..		-	-	-	-	-	-	-	-	-	-
Congenital malformations		2	-	-	-	2	-	1	-	-	3
Congenital debility ..		-	-	-	-	-	1	-	-	-	1
Premature birth ..		6	-	1	-	7	-	-	-	-	7
Injury at birth ..		1	-	-	-	1	-	-	-	-	1
Atelectasis		3	-	-	-	3	-	-	-	-	3
Icterus neonatorum ..		1	-	-	-	1	-	-	-	-	1
Disease of umbilicus ..		-	-	-	-	-	-	-	-	-	-
Pemphigus neonatorum ..		-	-	-	-	-	-	-	-	-	-
Other diseases of early infancy ..		-	-	-	-	-	-	-	-	-	-
Suffocation		-	-	-	-	-	1	-	-	-	1
Inattention at birth ..		-	-	-	-	-	-	-	-	-	-
Other Causes		-	-	-	-	-	-	-	-	-	-
TOTALS ..		14	-	1	-	15	4	1	-	3	23

Net infant deaths in the year 23 { Legitimate 20 ; Illegitimate 3

CAUSES OF, AND AGES AT DEATH DURING THE YEAR 1937 (Per Local Registrar).

Causes of Death	Net deaths at the subjoined ages of Residents whether occurring within or without the District												Total Deaths whether of Residents or non Residents in Institutions in the District
	All ages	under 1	1 and under 2	2 and under 5	5 and under 15	15 & under 25	25 & under 35	35 & under 45	45 & under 55	55 & under 65	65 & under 75	75 & over	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
All causes { Certified	660	23	5	2	4	15	17	29	50	106	176	233	187
All causes { Uncertified	4	-	-		-	-	-	-	1	-	2	1	-
1 Typhoid and Paratyphoid fevers	-	-	-	-	-	-	-	-	-	-	-	-	-
2 Measles	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Scarlet fever	-	-	-	-	-	-	-	-	-	-	-	-	-
4 Whooping cough	3	-	2	1	-	-	-	-	-	-	-	-	1
5 Diphtheria	3	-	-	1	2	-	-	-	-	-	-	-	2
6 Influenza	14	1	-	-	-	-	-	-	1	2	4	6	1
7 Encephalitis lethargica	1	-	-	-	-	-	-	-	1	-	-	-	1
8 Cerebro-Spinal fever	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Tuberculosis of respiratory system	26	-	-	-	-	5	3	6	4	4	1	3	29
10 Other Tuberculous diseases	6	1	1	-	-	1	2	1	-	-	-	-	7
11 Syphilis	-	-	-	-	-	-	-	-	-	-	-	-	-
12 General Paralysis of the insane, tabes dorsalis	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Cancer (malignant disease)	110	-	-	-	-	-	1	1	14	21	40	33	26
14 Diabetes	11	-	-	-	-	-	-	-	-	1	3	7	4
15 Cerebral hæmorrhage, etc.	56	-	-	-	-	-	-	1	2	15	18	20	10
16 Heart disease	167	-	-	-	-	-	3	6	10	17	59	72	13
17 Aneurysm	-	-	-	-	-	-	-	-	-	-	-	-	-
18 Other circulatory diseases	55	-	-	-	-	-	-	1	1	10	11	32	1
19 Bronchitis	22	2	-	-	-	-	-	1	1	2	4	12	1
20 Pneumonia, (all forms)	40	2	1	-	-	1	1	-	4	3	10	18	9
21 Other respiratory diseases	15	-	-	-	-	-	-	-	1	5	5	4	3
22 Peptic ulcer	5	-	-	-	-	-	-	-	3	2	-	-	4
23 Diarrhœa, etc. under 2 years	-	-	-	-	-	-	-	-	-	-	-	-	-
24 Appendicitis	3	-	-	-	-	1	1	-	-	1	-	-	4
25 Cirrhosis of liver	2	-	-	-	-	1	-	-	-	1	-	-	1
26 Other diseases of liver, etc.	3	-	-	-	-	-	-	-	-	1	2	-	1
27 Other digestive diseases	19	-	-	-	-	-	-	4	1	6	5	3	9
28 Acute and chronic nephritis	23	-	-	-	-	-	1	2	2	2	5	11	10
29 Puerperal sepsis	1	-	-	-	-	-	-	1	-	-	-	-	3
30 Other puerperal causes	2	-	-	-	-	1	1	-	-	-	-	-	1
31 Congenital debility, premature birth, malformations, etc.	16	16	-	-	-	-	-	-	-	-	-	-	17
32 Senility	7	-	-	-	-	-	-	-	-	-	2	5	1
33 Suicide	5	-	-	-	-	-	2	-	2	-	-	1	-
34 Other violence	22	1	-	-	1	4	2	3	3	4	4	-	12
35 Other defined causes	24	-	1	-	1	1	-	2	1	7	4	7	15
36 Causes ill-defined or unknown	3	-	-	-	-	-	-	-	-	2	1	-	1
Totals	664	23	5	2	4	15	17	29	51	106	178	234	187

75—85	85—95	95—105
165	64	5

VITAL STATISTICS OF TORQUAY DURING 1937 AND PREVIOUS TEN YEARS.

Year.	Population estimated to Middle of each Year by Registrar General.	Births.			Total Deaths Registered in the District.		Transferable Deaths.		Net Deaths belonging to the District.			
		Uncorrected Number.	Net.		Number.	Rate.	of Non-Residents registered in the District.	of Residents not registered in the District.	Under 1 year of age		At all ages.	
			Number.	Rate.					Number.	Rate per 1,000 Net Births	Number.	Rate.
	2	3	4	5	6	7	8	9	10	11	12	13
1927	37400	571	570	15·2	603	16·1	82	88	29	50	609	16·2
1928	38170	559	557	14·5	539	14·1	74	81	28	50	547	14·3
1929	39480	547	529	13·3	605	15·3	74	82	27	51	613	15·5
1930	39480	556	539	13·6	637	16·1	92	69	37	68	614	15·5
1931	42700	594	571	13 3	613	14·3	85	93	32	54	621	14·5
1932	44050	532	499	11·3	628	14·2	19	87	25	50	626	14·2
1933	44050	565	529	12·0	628	14·2	97	104	26	49	635	14·4
1934	44040	544	493	11.2	619	14·6	102	91	24	48	608	13·8
1935	44700	577	535	11·9	623	13·9	112	100	21	39	611	13·6
1936	44830	582	543	12·1	637	14·2	98	111	28	52	650	14·5
1937	44630	545	507	11 4	680	15·2	114	98	23	45	664	14·9

SECTION B.

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

1. (i) *Full particulars of the Public Health Officers of the Authority*, including their duties, are incorporated in the beginning of the Report.

During the year Dr. P. A. McCallum and Dr. B. Venn Dunn were appointed Obstetric Consultants. Dr. J. Masterton Thomson, part-time Ophthalmic Surgeon for school medical work, was appointed part-time Ophthalmic Surgeon for pre-school children from 1st January; and Mrs. C. Grugeon was appointed part-time orthoptist for squint training.

Mr. E. Quant, who had been part-time bacteriologist for over 30 years, resigned as from 31st December, 1936, and arrangements were made for this part of the work, which he had carried out, to be continued in 1937 by Dr. H. A. Fielden, Hon. Pathologist and Bacteriologist to the Torbay Hospital.

An additional Health Visitor, Miss P. Mullineaux, was appointed on the 4th January, 1937, Miss I. P. Randolph, a Health Visitor, left the Service in May to be married, and Miss M. E. Carter was appointed to fill the vacancy. In October, Miss K. M. Milburn, a Health Visitor, resigned on account of ill-health, and the vacancy was in process of being filled at the end of the year. Miss Milburn had been a Health Visitor in Torquay since 1920, and her efficient service throughout together with her capacity for detailed administration are reflected in the very satisfactory growth and progress of Infant Welfare work in the Borough: for a large amount of the success in this important branch is due to the way in which health visiting was carried out at the beginning of the scheme.

An additional part-time clerk, Mrs. V. Knapman, was also appointed to assist in the Maternity and Child Welfare department.

(ii) (*a*) *Laboratory Facilities.*

Arrangements are made for swabs, sputa and other materials to be examined by Dr. H. A. Fielden, Honorary Pathologist and Bacteriologist to the Torbay Hospital.

A number of swabs, milk and other examinations are carried out by the Medical Officer of Health at the Municipal Laboratory; and certain specimens, with routine milk samples, are sent to the County Laboratory, Exeter (administered by the County Council).

The following table shows the work carried out during the year:—

Municipal Laboratory (by the Medical Officer of Health)—

Throat Swabs	341
Milk Examinations	199
Other Examinations	33

By Dr. H. A. Fielden—

Throat Swabs	108
Sputa, etc.	50
Other Examinations	26

(*b*) *Ambulance Facilities.*

The arrangements for the joint Fire Brigade and Ambulance Service remain unchanged; but the personnel was increased by two drivers and a night telephonist which enabled a rota of duty and leave periods to be brought into operation.

The personnel of the combined Service is the Chief Officer, 10 whole-time men trained in fire and ambulance work, 15 retained firemen and a night telephonist.

During the year two new ambulances (an Austin 25 h.p. and a Morris 25 h.p.) were purchased by the Corporation; and there are now four ambulances for regular use, satisfactory for long-distance or local removal of cases and for infectious cases.

Both the personnel and the ambulances provide an adequate and efficient service for the needs of the area—a service which is maintained by the Corporation.

(*c*) *Nursing in the Home.*

In the arrangements made during the year for nursing in the home, from 1st April the grants paid to the Queen's Institute for District Nursing and the St. Marychurch and Babbacombe Nursing Association were revised; and, in addition to other duties, domiciliary nursing was included to provide for nursing of minor ailments and of cases of infectious disease, like whooping-cough, measles, influenza and pneumonia. This should prove very valuable when institutional accommodation cannot be provided; because skilled nursing is necessary in these diseases and is often not obtained.

(*d*) *Treatment Centres and Clinics.*

The following is a tabulated list of all clinics and treatment centres in the area :—

Service	Situation	Days open	Remarks
Controlled by Maternity and Child Welfare Committee.			
Maternity and Child Welfare	Barton School Clinic	Tuesday 2.30 p.m.	Infant Welfare Centres
	St. Marychurch Parish Hall	Thursday 2.30 p.m.	
	Primitive Methodist Schoolroom, Market Street	Friday 2.30 p.m.	
	Castle Road School Clinic	Friday 2 p.m.	M. and C.W. Dental Clinic
	Torbay Hospital	Thursday 2.30 p.m. 4.30 p.m.	Ante-Natal Clinic Post-Natal Clinic
Controlled by the Torquay Education Committee.			
School Medical	Castle Road	Tues., Wed., Thurs. and Sat. 9 a.m. Mon. and Fri. 2 p.m.	Minor Ailments Clinic
	Ditto	Thurs. 2 p.m	Ophthalmic Clinic
	Ditto	Daily except Mon. afternoon	Dental Clinic
	Ditto	Mon. and Thurs.	Orthoptic Clinic
	Barton School Clinic	Daily at 9 a.m.	Minor Ailments Clinic
	Ditto	Monday at 2 p.m.	Dental Clinic
Controlled by the Devon County Council.			
Tuberculosis	Whitecliff Hospital	Monday 2 p.m.	Tuberculosis Dispensary
Venereal Diseases	Torbay Hospital	Tues. and Wed. 5.30 p.m.	Clinic for men only
		Thurs. 5 p.m.	Clinic for women and children only
Controlled by the Voluntary Association, The Devonian Association for Cripples' Aid.			
Orthopædic	Castle Chambers	Wednesday all day	Orthopædic Clinic : Surgeon attends 2nd and 4th Wednesdays

(*e*) *Hospitals: Public and Voluntary.*

There has been no change in the Hospital arrangements of the Borough.

During the year a Scheme prepared by the Devon County Council under Section 29 of the Local Government Act, 1929, concerning Isolation Hospital Accommodation was approved by the Minister of Health. Under this arrangement beginning 1st January, 1938, Torquay Isolation Hospital will provide six beds for the Teignmouth Authority.

This scheme, together with the fact that there is inadequate cubicle accommodation at the Torquay Isolation Hospital renders some extensions necessary: and plans were submitted and approved which will provide a block of 12 cubicles, a small operating theatre, additions to the nurses' home and administrative block, together with a new laundry and disinfector.

2. (i) *Midwifery and Maternity Services. Midwives Acts.*

The Borough of Torquay is the Local Supervising Authority under the Midwives Acts, and the Medical Officer of Health is the Supervisor of Midwives.

During 1937 notice of intention to practise was received from 33 midwives; of these 13 were on the staff of the Torbay Hospital, 6 were on the staff of the Queen's Institute for District Nursing, 6 were on the staff of the St. Marychurch and Babbacombe Nursing Association, 7 were in private practice, and one, a County District Nurse, practises occasionally within the Borough boundary.

The following table gives the number of cases attended during the year:—

	As Midwives	As Maternity Nurses
By staff of Torbay Hospital	193	28
* ,, ,, Queen's Institute for District Nursing	117	49
* ,, ,, St. Marychurch and Babbacombe Nursing Association ...	81	29
,, Midwives in private practice (Domiciliary)	13	8
,, ,, ,, (Nursing Homes)	1	40

(**Under arrangements made with the Local Supervising Authority in pursuance of Section 1 of the Midwives Act, 1936*).

Under the rules of the Central Midwives Board the midwives are required to notify the Local Supervising Authority of certain circumstances, and the following notifications were received :—

(*a*) Sending for Medical Aid	99
(*b*) Notification of deaths :	
Mother	—
Infant	2
(*c*) Notification of stillbirths	2
(*d*) Notification of having laid out a dead body	—
(*e*) Notification of liability to be a source of infection	1
(*f*) Notifications of artificial feeding ...	19

The following table gives the reasons for which medical aid was sought on the 99 occasions by midwives :—

(*a*) *Condition of Mother.*

During Pregnancy—

General health unsatisfactory ...	3
Ante-partum hæmorrhage	5
Albuminuria	6
Excessive vomiting	1
Purulent discharge	1
Abdominal pain and rise of temperature ...	1

During Labour—

Prolonged labour and Uterine inertia ...	16
Abnormal presentations	7
Excessive hæmorrhage	1
Adherent Placenta	3
Rupture of perineum	25
Unsatisfactory condition of mother ...	3
Miscellaneous	2

During Lying-in Period—

Rigor with raised temperature	1
Rise of temperature to 100.4 deg. F. ...	2
Post-partum hæmorrhage	1

(*b*) *Condition of Infant*

Any malformation or deformity endangering child's life	1
Dangerous feebleness	4
Discharging eyes	12
Cyanosis	3
Jaundice	1

Under the Midwives Act, 1918, the Local Authority is responsible for the payment of fees to private doctors when summoned by midwives to give medical aid; and the Authority recovers all, or part of, the cost from the patients, except in necessitous cases, when the cost is remitted.

During the year ending 31st March, 1938, the fees paid to private doctors amounted to £91 15s. 0d., of which £25 18s. 0d. was recovered from the patients. I am indebted to the Borough Treasurer, Mr. E. C. Riding, F.S.A.A., for these and other financial details.

Midwives Act, 1936.

On 31st July, 1936, this Act became law, and the Local Supervising Authority was charged with the duty of preparing a scheme. The object of the scheme is to secure the organisation of a domiciliary service of salaried midwives, under the control of the Local Supervising Authority, to raise the status of the midwifery profession by providing adequate salaries and secured prospects with pension rights, and in general to make an important advance in the improvement of the maternity services in the essentially invaluable campaign for reducing maternal mortality and maternal morbidity.

The scheme in Torquay provides, subject to certain principles, for the utilisation of the services of the two voluntary organisations, the Queen's Institute for District Nursing and the St. Marychurch and Babbacombe Nursing Association; and annual grants of £260 and £130 respectively are paid to these associations as from 1st April, 1937, when the scheme started.

Under the scheme, free choice of midwife was provided for, and arrangements were also made for more effective co-operation between the work of district midwives, of hospitals and of private doctors; for while it is essential to prevent cases remaining in unsuitable homes or in suitable homes when institutional treatment is required, it is equally essential to educate the public in the advantages and safety of domiciliary confinements in normal circumstances.

Other provisions are that the Local Authority must be satisfied that the training, qualifications, and experience of the midwives employed are adequate, and that post-graduate courses must be attended without charge to the midwife and

in addition to the annual holiday. The midwives are to be whole-time servants of the Associations (although not required to be full-time on midwifery service); and details were also included with regard to salary, uniform and laundry allowance, travelling expenses, board and lodging, and superannuation with an age limit at 55 years of age.

In July one private midwife surrendered her certificate and was compensated; and the domiciliary midwifery is, except for a few private cases, almost entirely carried out by the two voluntary associations under the scheme.

Maternal Mortality and Circular 1622.

Following Circular 1622 a memorandum dealing with this circular and with the Report Cmd. 5422 was submitted by the Medical Officer of Health and the recommendations were subsequently approved by the Corporation; and a number of extensions of the service were arranged, which will be described under the appropriate sections.

(*a*) *Ante-Natal Services.*

The ante-natal clinic, which has been held for some years at the Torbay Hospital, is satisfactory and the general arrangements are unaltered; but provision has now been made for one of the health visitors to attend this clinic each week to maintain contact and to follow up with home visits any cases in which this is required.

The following is a summary of the work of the clinic:—

	All Women	Torquay Women
(*a*) Total attendances made by expectant mothers	1039	878
(*b*) Average attendance of expectant mothers	19.9	16.8
(*c*) Total number of expectant mothers who attended during the year ...	287	226
(*d*) Percentage of total notified births and stillbirths represented by the number (*c*)	51.3	43.5

An extension of ante-natal service was arranged as a general practitioner's section of the scheme whereby no case is dealt with by the midwives on the district without a medical examination at the ante-natal clinic or by a private doctor (except in the rare cases in which the woman refuses this). Two ante-natal examinations are

arranged (a general examination early in pregnancy and an obstetrical examination at about the 36th week of pregnancy) ; and, if required, further examinations are available under the Midwives Act. Cases can also be sent by the practitioner to the ante-natal clinic for consultative opinion. A special form is filled up by the doctor and appropriate instructions, as the case may require, are given for the midwife ; and so far the scheme is working very satisfactorily, all cases having been seen at the clinic or by a doctor.

In addition, two beds are now provided at the Torbay Hospital for ante-natal cases and the Local Authority is responsible for the cost ; during 1937, eleven cases were admitted for ante-natal treatment.

(*b*) *Maternity Accommodation in Hospital.*

There is adequate accommodation at the Torbay Hospital for lying-in patients, nine beds being available and the Local Authority accepts responsibility for payment of maintenance and medical treatment on account of mothers who are unable to pay the full cost.

Cases are recommended for this provision because of probable complications, on account of previous difficult confinements, or owing to unsuitable home conditions or for other general reasons. Certain emergency cases sent from the district owing to unforeseen difficulties suddenly arising, are also paid for by the Authority when the patients are unable to meet the full charge of maintenance.

During 1937, 199 cases were admitted to the Maternity Ward, and 112 were Council aided.

Each case is investigated and in almost every instance the Local Authority recovers part of the cost ; during the year ending 31st March, 1938, the Local Authority paid £785 2s. 0d. to the Torbay Hospital in respect of maternity cases, and the sum of £347 18s. 9d. was recovered from the patients.

(*c*) *Consultant Service and Emergency Units.*

Dr. P. A. McCallum, Hon. Obstetric Physician at the Torbay Hospital, and Mr. B. Venn Dunn, Hon. Assistant Surgeon at the Torbay Hospital, are Obstetric Consultants for the Borough; and an emergency unit (consisting of the consultant, anæsthetist, nurse, sterilised equipment and blood transfusion) is also available for any domiciliary case which might be too ill to move to hospital.

(*d*) *Post-Natal Services.*

A post-natal Clinic has been started at the Torbay Hospital; and arrangements have been made for cases requiring it to have the required gynæcological treatment either as out-patients or as in-patients.

A general practitioner's section of post-natal service has also been established, and cases can also be sent to hospital for treatment after the post-natal examination at home.

It is more difficult to get the mothers to appreciate the need for a post-natal examination, but by individual personal explanation to each mother it is hoped that this section will develop considerably. The day will then be appreciably nearer when every mother, within a reasonable time after her confinement, will be restored to full physiological activity and normal health.

(*e*) *Provision of Milk.*

In accordance with the instructions of the Minister of Health in Circular 1519, the arrangements made for the supply of milk to expectant mothers and for infants were reviewed; and the Medical Officer of Health prepared a scheme which was subsequently approved by the Maternity and Child Welfare Committee, confirmed by the Council and submitted to the Minister of Health. It was pointed out that the modifications suggested in the Circular were welcomed—that it is not desirable to maintain a limit of one pint per day or to limit the supply of milk to the last months in cases of pregnancy, or to the first 12 or 18 months of age in the case of infants. For while some cases were satisfactorily dealt with under

previous arrangements, it will be very much more helpful in circumstances warranting it, to increase the provision in pregnant cases to assist in maintaining adequate calcium-phosphorus metabolism, and to increase the provision to pre-school children especially in circumstances such as anæmia and debility following whooping cough, measles or other acute infections.

The previous restrictions were removed and a new income scale adopted, providing for milk to be supplied free of cost and at half price according to the individual circumstances of the case ; the milk supplied is pasteurised milk. This has resulted in a considerable increase (although the full scheme only operated from July) ; and during the year 201 cases were dealt with, the total amount supplied being 3,024 gallons at an approximate cost of £350.

This new provision is greatly to be welcomed and of inestimable value, for the importance of milk in diet cannot be over-estimated. The needs of an expectant or nursing mother are great, and should average two pints a day, while children need from one to two pints a day, and other members of the community at least half a pint. From the health standpoint there is no other single measure which will do more to improve the health, development, and resistance to disease of the rising generation, than a largely increased consumption of safe milk, especially by mothers, children and adolescents. And it is immeasurably to be deplored that in large sections of the community the diet is dangerously deficient in milk.

Enough knowledge has been shed on the problem of nutrition, and the opportunities and potentialities are immense. It has wisely been said that "If the new science of nutrition is about to be applied for the welfare of the people, we are on the eve of what will be the greatest social reform of the century."

Home Helps. The provision of home helps has been arranged by which suitable women will act in this capacity and do the house-work while the mother is in hospital or at home in bed. For part of 1937 in which the scheme operated, one case was provided with a home help.

Dental Scheme. This is working satisfactory and is adequate except so far as the provision of dentures is concerned; under the extended scheme, in the case of mothers rendered edentulous arrangements are made for dentures to be provided at the expense of the Local Authority, and part of the cost recovered according to circumstances.

It will be evident from the above sections that midwifery practice is essentially one for the close co-operation and the combined effort of all the personnel engaged in it; and moreover it is obvious that the facilities provided must be fully utilised by the mothers, and by the team of health visitors, midwives, general practitioners, medical officers of clinics, medical staffs of hospitals, consultants and the medical officer of health.

The best results will only be obtained if all the workers act together as a team, and literally and metaphorically play the game, even though it means individual effacement here and there. And it is sincerely hoped that it will be true—

"Where order in variety we see,
And where, though all things differ, all agree;"

for then success will be nearer, and then the maternity services can travel hopefully to reach the goal of safe motherhood.

Maternal Mortality.

There were three maternal deaths and the maternal death-rate was 5.64 compared with nil in 1936; the average for Torquay for the past five years was 3.31. The rate for England and Wales in 1937 was 3.11, the maternal mortality for puerperal sepsis being 0.94, and for other accidents and diseases of pregnancy and parturition 2.17; the average rate for England and Wales for the past five years was 3.89. Owing to what is statistically called paucity of data, it is not very satisfactory and may be misleading to compare the annual rates for Torquay and for England and Wales. The maternal death-rate is calculated on the number of deaths due to diseases of pregnancy, childbirth and the puerperal period per 1,000 registered live

and stillbirths; and as there are only just over 500 births in Torquay the maternal mortality is liable to rather wide variations, because each death increases the rate by approximately 2 per 1,000.

Infant Welfare Centres.

The work at the three Centres held each week can be summarised as follows:—

	Total Attendances	Children under 1	Children 1 to 5	New Admissions
Barton Centre (Tuesday afternoon) ...	2209	1277	932	114
St Marychurch Centre (Thursday afternoon) ...	2058	1281	777	117
Market Street Centre (Friday afternoon) ...	3116	1868	1248	176

The medical arrangements are unaltered, and the Deputy Medical Officer of Health is present at each Centre for consultation; one of the Health Visitors is also present and acts as an important link between the medical consultation and home visiting, being able to follow up each case and ensure as far as possible that the advice is being carried out or that the necessary treatment is being obtained. A District Nurse from the Queen's Institute or from the St. Marychurch and Babbacombe Nursing Association also attends to weigh the children.

The Medical Officer sees each baby when normal progress is being made, weekly up to two months, fortnightly up to six months, monthly from six months to twelve months, and three-monthly from one year to school age; and others are seen as occasion demands.

The social aspect of each Centre is in the hands of a Committee of Voluntary Workers, and I gratefully acknowledge the very willing assistance constantly given by all those helpers who so regularly attend. Perhaps much more satisfying than the gratitude which the Maternity and Child Welfare Service obviously owes for such courtesies, these voluntary workers can certainly feel that their efforts contribute in no small degree to the successful results which are obtained.

Children under School Age.

Maternity and Child Welfare Authorities have heavy responsibilities since much of their work has for its objective the preservation of infant life, the prevention of defects and the maintenance of good physique during the first few years of the growing child.

After the period of infancy has passed, many mothers do not appreciate the need for maintaining regular, even if less frequent, attendance at the Welfare Centres; and every effort is made to ensure that as many "toddlers" as possible attend periodically for a full clinical examination by the Medical Officer. For by the medical supervision at the Centre, and by more frequent home visiting, any suspected defect or incipient disease will be ascertained at the earliest possible moment, and referred to private doctors or clinic for appropriate treatment; while the mothers will be still further impressed with the necessary advice in the care and management of the children.

It is gratifying that all the School Clinic facilities are available for the pre-school children; and the most recent addition to these facilities is the Orthoptic department for squint training—another valuable preventive measure.

In addition, the Education Authority when considering the provision of new premises for their Open-Air School, have included an Open-Air Nursery School for 40 selected children; the site has been acquired and the plans have received the preliminary approval of the Board of Education. A good home is always the best place for bringing up a child, but unfortunately this is not yet universally obtainable; and enormous benefit will be obtained by the provision of an Open-Air Nursery School, supplemented later by nursery classes at the ordinary schools.

All these developments towards the full comprehensive scheme augur well for the rich harvest that awaits careful attention and efficient nurture during the pre-school age period.

Report of the Dental Department.

By Norman Harris, L.D.S., R.C.S.

The number of patients who attended the Dental Clinic was 189, as compared with 153 in 1936, most of these patients having been referred by the Medical Officer, or from the Ante-Natal Clinic.

These 189 patients made a total number of attendances of 297. One afternoon session is devoted to Welfare work at the Castle Road Clinic, but a certain amount of over-lapping is inevitable, as some patients find it more convenient to attend the Barton Clinic. It is also found impossible to perform extractions with general anæsthesia during the afternoon session; a part of the morning allotted to anæsthetics for school children is therefore devoted to Welfare patients.

The work done was as follows:—

		Fillings	Extractions	Other Operations
Permanent Teeth	..	19	588	40
Temporary Teeth	..	7	198	57

The Medical Officer administered general anæthesia on 126 occasions for the removal of 397 permanent, and 206 temporary, teeth. It is regrettable that such a large number of extractions is found necessary, but in the case of the mothers on too few occasions is there any possibility of restoring their teeth by conservation. In most cases acute pain, coupled with chronic sepsis, renders complete clearance advisable. However, when possible, any useful functional teeth are saved, as often these are of great assistance as a form of retention for dentures.

Advice in the form of talks on oral hygiene has been given on 171 occasions, and 22 scalings have been performed. The standard of oral cleanliness is not good; unfortunately during the years between school-leaving age and becoming eligible for treatment under the National Health Insurance or Welfare schemes, no treatment or very little treatment is obtained in the majority of cases. It is to be hoped that some means may one day be devised to bridge this period. Until then, it is to be feared that the cost of obtaining the necessary conservative treatment from a private dentist may act as a

deterrent. Naturally, most of the benefit of rendering all children dentally efficient at school-leaving age is nullified if no treatment is obtained during the next five years.

Patients who are in the position to do so are expected to make their own arrangements to provide dentures, but where they are unable to do so, assistance has been provided in a limited number of cases. Six cases were referred to the Council of Social Service, who very kindly gave financial help; and five patients were referred to the Medical Officer of Health, in connection with a scheme whereby the Public Health Committee make a grant towards the cost of dentures in certain cases.

(ii) *Institutional Provision for Mothers or Children.*

The arrangements for institutional provision for children are unaltered; there is no institutional provision for mothers other than that described under *Maternity Services.*

(iii) *Health Visitors.*

At the end of 1936, there were two Health Visitors, of whom, one devoted half-time to school medical work, and the other half to health visiting; an additional Health Visitor was appointed and started in January, 1937, which renders possible an extension of health visiting. Unfortunately owing to ill-health and subsequent changes in staff, this extension of the work was not realised as had been anticipated; because throughout the greater part of the year the personnel of the staff was one short.

Early in 1938, this deficiency was made good, and taking the nursing staff of the Public Health and the School Medical Services, there will be the equivalent of $2\frac{1}{2}$ nurses for health visiting, and $1\frac{1}{2}$ for school work; further reorganisation will gradually provide for the co-ordination with the ultimate unification of the nursing staff.

A summary of the work is shown in the following :—

Record of Work of Health Visitors, 1937.

Visits paid by Health Visitors:—

To expectant mothers	(1) First visits	96	(2) Total visits		149
To infants under 1 year	(2) ,,	475	(2)	,,	1912
To children aged 1—5 years				,,	3543
Still births investigated				,,	21
Miscellaneous visits				,,	113
Cases out when visited				,,	1052
Cases removed				,,	366
Cases under Children and Young Persons Acts (5 to 9 years)				,,	133
				Total visits	7289

Attendances at the Welfare Centres	..	165
Cases not considered necessary to visit	..	15

In cases of removal particulars are sent to the Medical Officer of Health of the district to which the parents have gone; records of 167 cases were sent to other Authorities and the cases of 75 children from other areas were enquired into, while 23 removals could not be traced.

Excellent work is being carried out by the Health Visitors, and it is not easy to over-estimate the value of their visits and of their advice to the individual mother. Possibly we expect too much of the average working-class mother; she is expected to be a capable housewife, to keep her house clean, to plan her money, to have a knowledge of food values, to buy in the right markets, to cook well, to clothe and care for her childen—in short, she is expected to do the combined duties which are usually shared between several individuals in the so-called "better class" families, who in addition have the advantage of more education. Small wonder is it that few attain this high standard. And it is only by the individual advice helpfully given, yes and repeatedly given, which the Health Visitor alone can do, that any progress is to be expected.

(iv) *Child Life Protection*

The Borough of Torquay administers this work which provides for the supervision of all children under 9 years of age, who are placed as foster-children for payment apart from their parents.

The Health Visitors act as Child Protection Visitors, and their work in this capacity is summarised below. Generally it is found that the children are well cared for, although an occasional case arises when special vigilance is required to prevent unfortunate results. Foster-children are visited at much more frequent intervals than is the case with the routine health visiting.

No. of visits paid to and on behalf of foster-children ..	207
No. of persons on the Register who were receiving children at the beginning of the year	18
No. of persons on the Register who were receiving children at the end of the year	24
No. of foster-children at the beginning of the year ..	20
No. of foster-children at the end of the year	28

(v) *Orthopædic Treatment.*

The arrangements under this scheme are unaltered, and a Voluntary Association, the Devonian Association for Cripples' Aid, is responsible for the organisation. The work is invaluable, for crippling is on the whole preventible ; and with early ascertainment, prompt adequate treatment, continuous after-care, the day must surely be nearer when crutches, calipers and irons will lie as rusty relics on the walls of our museums.

A summary of the work is given below :—

No. of cases on Clinic Register at beginning of year (including one tuberculosis case under supervision of County Council) ..		50
No. of new cases during year		23
Conditions under treatment were :—		
Rickets	13	
Kyphosis and scoliosis	2	
Genu valgum	12	
Genu varum	1	
Talipes varus	3	
Pes planum	3	
Calcaneo valgum	5	
Intoeing	6	
Pronated and eversion of feet	1	
Infantile paralysis	3	
Spastic hemiplegia and paraplegia	3	
Erb's paralysis	2	
Congenital dislocation of hip	3	
Other congenital deformities	7	
Hypetrophy of leg	—	
Tuberculosis of bone	1	
Mental defect, mild spasticity	1	
Torticollis	2	
Accessory thumb	1	
Nothing abnormal found	4	
No. of transfers out and discharges during year		35
Removals	2	
Transfers to Education Department	20	
Discharged cured	9	
,, refusing treatment	4	
No. of cases in Hospital at beginning of year		—
No. of cases admitted to Hospital during year		8
No. of cases in Hospital at end of year		1
Total attendances at Clinic during year		231
No. of cases on Clinic Register at end of year		38

(vi) *Registration of Nursing Homes.*

The Borough of Torquay administers this work, and the Medical Officer of Health is the inspecting officer; bye-laws which had been approved by the Corporation were confirmed by the Minister of Health subsequent to the coming into operation of the Public Health Act on the 1st October.

The co-operation of the local Division of the British Medical Association is welcomed in making the provisions of the Act known to any person who should apply for registration, and in assisting the Health Department in tracing unregistered Homes; and a list of the registered nursing homes is sent periodically to every doctor. During the year two applications for registration were the result of this co-operation.

The following are the details of registration :—

(i) No. of applications for Registration during 1937	..	2
(ii) No. of Homes registered		2
(iii) No. of Orders made refusing or cancelling Registration	..	—
(iv) No. of appeals against such orders		—
(v) No. of cases in which such orders have been—		
(*a*) confirmed on appeal		—
(*b*) disallowed		—
(vi) No. of applications for exemption from registration	..	4
(vii) No. of cases in which exemption has been—		
(*a*) granted .. 4		
(*b*) withdrawn .. —		
(*c*) refused .. —		
(viii) No. of Homes on the Register at the end of 1937	..	14

SECTION C.

SANITARY CIRCUMSTANCES OF THE AREA.

1. (i) *Water.*

The Borough Water Engineer, Mr. Norman G. Elliot, M.Sc., A.M.Inst.C.E., has kindly supplied me with the following details.

"No new sources of public water supply have been adopted and no important extensions of mains have taken place.

The water has been filtered more completely than in previous years by the addition of alumina ferric, whereas in the past the water was merely run through rapid sand filters with no coagulant.

The supply of water has been satisfactory in quality and quantity.

The total amount of water consumed during the year was 1,052,000,000 gallons, equal to 2,882,000 gallons per day, which is an increase of 92,626 gallons per day, as compared with the previous year."

Chemical analysis and bacteriological examination are made each month; these analyses remain singularly consistent, and the following is a representative result:—

CHEMICAL RESULTS IN PARTS PER 100,000

Appearance	Bright and clear
Colour	Normal
Odour	Nil
Total Solids 180 deg. C.	6.5
pH	8.2
Chlorine in Chlorides	1.8
Nitrogen in Nitrates	0.4
,, Nitrites	Nil
Hardness Permanent 4.8	Temporary 0.8
Free Ammonia	Nil
Albuminoid Ammonia	0.0042
Oxygen absorbed in 4 hours at 80 deg. F.	0.105
Metals—Lead, Copper, Zinc	Nil

BACTERIOLOGICAL RESULT:

No. of bacteria per ml.:—	
on agar 3 days at 20 deg. C.	40
,, ,, 2 ,, ,, 37 deg. C.	2
Bacillus coli	Absent in 100 ml.
No. of coli-aerogenes organisms per 100 ml.	Nil

Report on analyses.

This is a clear and bright water, of normal colour and soft in character; it contains no excess of saline matter and is free from metals. The water is of satisfactory organic quality and reaches a high standard of bacterial purity.

(ii) *Drainage and Sewerage.*

The Borough Engineer, Mr. P. W. Ladmore, M.Inst.C.E., has kindly supplied me with the details in connection with drainage and with the necessary information for Sections 3 (i), (ii).

"Approximately 2,800 yards of sewer, 9 inch to 30 inch in diameter, have been laid during the past twelve months to provide for new development. Approximately 700 yards of 9 inch to 33 inch diameter sewer have been laid in order to remove danger of flooding in the Chelston area. The Corporation have approved a scheme for the removal of storm water overflows which discharged into the bay and for the prevention of flooding at various points within the Borough."

Almost the whole of the villa residences, and the majority of hotels and boarding-houses have the most modern sanitary arrangements; and except in a few cases of the outlying parts where difficulties of levels or distance from sewers prevent it, drains are connected to the sewers.

2. *Rivers and Streams. Any action taken to check the pollution of rivers or streams in the area.*

There are only two small streams, one rising near the railway at Lawes Bridge and the other at Watcombe; these are not subject to pollution other than that arising from surface road washings.

3. (i) *Closet Accommodation.*

No conversions from conservancy to water-carriage took place during the year.

(ii) *Public Cleansing.*

A marked increase in the number of collections of refuse has been made during the last twelve months, particularly from the smaller hotels and boarding-houses during the busy season.

The arrangements at the dust destructor are unaltered, and remain entirely satisfactory.

(iii) *Sanitary Inspection of the Area.*

The systematic inspection of all areas in the Borough has been carried out during the year by the staff under the Senior Inspector. All this work is invaluable and extremely important, and reflects the greatest credit on the staff concerned; particularly is the inspection of meat and food of a very high order.

And when it is realised that every single duty properly performed is apt to arouse opposition, it speaks well for the department that the work is done efficiently with the minimum of friction or of legal proceedings.

REPORT OF THE SENIOR SANITARY INSPECTOR

G. E. BODY, C.R.S.I.

The following details show the number of inspectors and their main duties.

Chief Inspector:—General supervision of the District Sanitary Inspectors and all the duties of the statutory officer.

Four District Inspectors:—The town is divided into four districts; each Inspector is responsible for:—

1. The sanitary work in connection with the following premises:—

	N.E.	N.W.	S.E.	S.W.
Dairies	20	11	23	25
Cowsheds	9	6	1	7
Schools	8	4	4	6
Public conveniences	6	5	13	3
Workshops	76	30	95	115
Factories	17	7	25	18
Butchers' Shops	16	7	16	17
Cooked meat shops	3	1	7	5
Grocers	50	27	30	28
Greengrocers	29	11	38	19
Fish fryers	5	3	5	6
Fishmongers	3	1	4	7
Bakehouses	8	3	12	8
Common Lodging House	—	—	1	—
Tripe dresser	—	1	--	—
Slaughterhouses	4	1	—	1
Places of entertainment	1	—	6	4
Rag and Bone Stores	—	2	3	2
Shops	205	67	400	345
Pigsties	7	6	—	3
Stables	4	7	4	6

2. House inspection for individual nuisances and detailed information of the condition of property for Clearance Areas, reconditioning, etc., and overcrowding under the Housing Act, 1935.

3. Enquiries into cases of infectious diseases and supervision of disinfection.

4. The inspection of carcases in slaughterhouses and butchers' shops and all foodstuffs in other shops or premises. Each Inspector takes it in turn to supervise slaughtering at the Public Abattoir one week each. The private slaughterhouses in the North East District are inspected alternately by the North East and the North West District Inspectors.

5. Supervision of drainage work and other structural alterations or repairs carried out under the Public Health Act, except the erection of new buildings.

Summary of Work of Sanitary Inspectors.

Houses :

	TOTAL
Houses inspected	416
Houses visited	1300
Visits to Stentiford's Hill property	11
Visits to Westhill and Hele properties	181
Dirty premises limewashed and cleansed	31
Rooms disinfected	424
Cases of overcrowding abated	81
Defective floors repaired	48
Water supply laid direct from main to tap over sink	24
Defective yards re-paved	30
External plastering repaired	51
Internal ,, ,, ...	40
Stoves repaired	28
Coppers repaired	9
R.W.P.'s and gutters repaired	49
Nuisances from keeping fowls and animals	23
Ashbins provided for house refuse	50
Roofs repaired	49
Handrails fixed	8
Doors and door frames repaired or renewed	45
Windows repaired or renewed	67
Yards and outbuildings cleansed	13
Houses closed as unfit for human habitation	7
Houses repaired	90
Overcrowding survey—houses visited	975

Drainage :

Smoke test applied	538
Water test applied	153
New sets of house drains laid	62
Defective house drains repaired	84
Intercepting traps fixed	39
Fresh air inlets fixed	39
Old "Masons" traps and other old types abolished	19
Inspection chambers to drains built	135
Drains ventilated to head of system	76
Soil pipes fixed to outside buildings and ventilated	60
Iron and brick traps removed and earthenware gullies fixed ..	171
Waste pipes from baths, lavatories and sinks trapped ..	136
Choked drains cleared	88
Defective w.c. cisterns repaired or new provided	98
W.C.'s repaired or new provided	135
Glazed sinks fixed	35
Lavatory basins fixed	83
Housemaids sinks fixed	—
Sanitary certificates granted	4
Baths fixed	32

Shops :

Shops inspected under Shops Act	477

Workshops:

Workshops visited	279
Workshop notices	47

Food and Places where Food is Prepared:

Slaughter-houses visited			2695
Butchers' shops			5210
Butchers' carts			171
Fish Quay			170
Railway siding			121
Market Hall			132
Other shops			1422
Bakehouses			124
Fish and chip shops			82
Ice cream shops			93
Tripe dressers			54
Cafés, etc., visited			66
Carcases inspected—Shops	31,479		47905
Slaughterhouses	16,426		
Weight of food destroyed			29003 lbs.
Visits to dairies			598
Visits to cowsheds			203
Samples of milk and other food obtained			390

Other Visits and Miscellaneous:

Visits to piggeries	93
,, stables	54
,, common lodging houses	12
,, public elementary schools	142
,, private schools	9
Marine stores	27
Places of entertainment	9
Number of vessels inspected	164
Offensive accumulations removed	75
Miscellaneous	403
Inspections, rats and mice	130
Number baits issued, rats and mice	4851
Public conveniences inspected	212
Caravans and tents inspected	295
Samples of rag flock examined for percentage of chlorine	2
Re-visits in connection with above works	2246

Clerical Work:

Legal notices	21
Preliminary notices	534
Letters and communications in connection with the work of the department	2241
Verbal notices	56
Written and verbal complaints	340

Fish and Chip Shops. There are 19 fish and chip shops and three hawkers on the register.

Five fish fryers are subject to annual licensing. The objection to this type of business is the smell associated with frying and the discarding of paper bags and wrappings in the street after an *al fresco* supper; this is especially noticeable during July and August.

Other Offensive Trades. One tripe dresser and eleven rag and bone and marine store dealers are on the register.

Rag Flock Act. All upholsterers utilise guaranteed rag flock only. The samples analysed in the Public Health Laboratory were found to conform to the required standard.

Contagious Diseases of Animals Act. Six cases of Swine Fever were notified, four of these being discovered among pigs sent to the Public Abattoir for slaughter; in all nine pigs were destroyed.

Insect Pests (Destruction) Acts. No cases were detected or notified during the year.

Rats and Mice (Destruction) Act, 1919. Each District Inspector supervises the treatment of rat infested premises.

There were no areas that could be termed infested, in fact many places were exceptionally free of these pests.

During the year under review 334 different premises were treated and 4,851 baits supplied.

Places of Entertainment. Visits were paid to eleven places of entertainment and special attention given to the sanitary arrangements and ventilation; all were found clean and in good order.

Common Lodging House. There is one registered common lodging house in the Borough, and inspection is made monthly; it was found satisfactory on each occasion.

Bakehouses. There are 29 bakehouses, one of the underground type which is not very satisfactory; two or three of the occupiers had to be cautioned as regards cleanliness of the workroom and utensils.

1. Inspection of Factories, Workshops, and Workplaces.
Including inspections made by the Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Occupiers Prosecuted
Factories (including Factory Laundries) -	83	2	—
Workshops (including Workshop „) -	152	8	—
Workplaces (other than Outworkers' Premises)	44	3	—
Total - - -	279	13	—

2. Defects Found in Factories, Workshops, and Workplaces.

Particulars.	Number of Defects.			
	Found.	Remedied	Referred to H.M. Inspector.	Prosecutions.
*Nuisances under P.H. Acts—				
Want of Cleanliness - -	23	19	—	—
Want of Ventilation - -	2	2	—	—
Overcrowding - -	—	—	—	—
Want of Drainage of Floors -	1	1	—	—
Other Nuisances - -	6	8	—	—
Sanitary Accommodation — Insufficient - -	5	5	—	—
Sanitary Accommodation — Unsuitable or Defective	5	5	—	—
Sanitary Accommodation — Not Separate for Sexes -	5	6	—	—
Offences under the Factory and Workshop Acts :—				
Illegal Occupation of Underground Bakehouses - -	—	—	—	—
Other offences - - - (Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921.)	—	—	2	—
Total - -	47	46	2	—

* Including those specified in Sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

(iv) *Shops.*

The duties under the Shops Act, 1934, are confined, so far as the Public Health Department is concerned, to the question of :—

(*a*) suitable and sufficient means of ventilation.
(*b*) maintenance of reasonable temperature.
(*c*) sanitary accommodation.
(*d*) means of lighting
and (*e*) the provision of washing facilities.

During the year the District Sanitary Inspectors have inspected 477 shops. There were nine notices served, and four exemptions were granted; the number of facilities provided included :—

(*a*) improved ventilation - -	1
(*b*) temperature maintained - -	3
(*c*) sanitary conveniences - -	9
(*d*) washing facilities - -	9

(v) *Smoke Abatement.*

In a town like Torquay, the work under this section is not very considerable ; a few observations have been made in connection with alleged nuisances, but nothing has occurred which has justified any formal notice or action.

The air is practically free from smoke or from anything which cuts off the ultra-violet radiation from the sky; this is shown by readings of the ultra-violet rays which have been carried out by me at a number of places in the town, with the readings on the top of the pier shelter as the maximum standard.

(vi) *Swimming Baths and Pools.*

(*a*) *Public Swimming Baths.*

At the Medical Baths, the Corporation have a fine covered warm seawater swimming bath measuring 90ft. by 30ft., the depth being graduated from 4ft. to 7½ft. The average temperature of the water is a minimum of 76 deg. F. in the summer, increased to 80 deg. F. in the winter, when cubicles are also centrally heated. The bath is

opened for mixed bathing on Sundays and weekdays; and private sea and fresh water baths are provided in the gallery. The services of a professional certificated instructor are available.

The sea water is pumped direct from Beacon Cove, which adjoins the Medical Baths; a modern filtration plant filters, aerates and chlorinates the whole of the water in the bath in the course of every three hours.

The chlorination is controlled by colorimetric tests, and the water is subjected to bacteriological examination at regular intervals in the Town Hall laboratory. During the year 15 examinations were made, in all 30 samples being taken (one near the inlet and one near the outlet); 28 results were quite satisfactory and two were less satisfactory. On investigation it proved that the chlorination plant had been temporarily out of order, and the defect was soon rectified.

(vii) *Eradication of Bed-Bugs.*

(1) *The number of houses infested* during the year was:—

(*a*) Council houses - -	19
(*b*) Other houses - -	49

The number of houses disinfested was:—

(*a*) Council houses - -	19
(*b*) Other houses - -	49

(2) *The methods employed for freeing infested houses from Bed-Bugs.*

Woodwork is removed from walls, after which an insecticide is sprayed all over the surfaces with "Solution D" and "Zaldecide."

(3) *The methods employed for ensuring that the belongings of tenants are free from vermin before removal to council houses.*

Notice is obtained before the transfer of tenants so that the Sanitary Inspectors can visit and inspect prior to removal; any belongings of the tenants found to be verminous are dealt with before the transfer is effected.

(4) *Whether the work of disinfestation is carried out by the Local Authority or by a Contractor.*

All the work is carried out by the Local Authority.

(5) *The measures taken by way of supervision or education of tenants to prevent infestation or re-infestation after cleansing.*

Houses that have been infested are, after cleansing, kept under observation and frequent re-inspections are made by the District Sanitary Inspector; each inspector has one of the electric torches with magnifying glass, designed by Dr. W. Gunn of the Glasgow Health Department, so as to be able to search as thoroughly as possible for any evidence of re-infestation.

4. *Schools.*

The sanitary conditions and the water supply of the schools in the Borough are satisfactory; in fact, during the past decade very considerable progress has been made in the hygiene of school buildings and of school premises. Several new schools have been built, and a large senior school for 960 children is in course of construction; and a number of the older school premises have been closed. The new schools are built on the Derbyshire plan with very efficient ventilation and adequate air movement, as measured by the kata-thermometer; and these are important factors in the maintenance of nutrition by stimulating metabolism. Full results have been given in the reports of the School Medical Officer.

These vast improvements must have extremely beneficial effect on the health of the children; and as a constant object lesson in general hygiene, cleanliness and tidiness, they are a powerful influence for good in health education and in creating a healthy way of life. All this will undoubtedly be reflected in the homes which these children are, after all, one day destined to control.

There have been no large outbreaks of infectious disease in the schools and there was no school closure in 1937.

Section D.

HOUSING.

The following is the table of information required :—

1. *Inspection of Dwelling-houses during the Year :—*

(1) (*a*)	Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ...	249
(*b*)	Number of inspections made for the purpose ...	1309
(2) (*a*)	Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 ...	35
(*b*)	Number of inspections made for the purpose ...	184
(3)	Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ...	7
(4)	Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation ...	117

2. *Remedy of Defects during the Year without Service of formal Notices :—*

	Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers ...	90

3. *Action under Statutory Powers during the Year :—*

(a)	Proceedings under sections 9, 10 and 16 of the Housing Act, 1936:	
(1)	Number of dwelling-houses in respect of which notices were served requiring repairs ...	12
(2)	Number of dwelling-houses which were rendered fit after service of formal notices:	
(*a*)	By owners ...	9
(*b*)	By Local Authority in default of owners ...	—
(b)	Proceedings under Public Health Acts:	
(1)	Number of dwelling houses in respect of which notices were served requiring defects to be remedied ...	5
(2)	Number of dwelling-houses in which defects were remedied after service of formal notices:	
(*a*)	By owners ...	4
(*b*)	By Local Authority in default of owners ...	—

(c) Proceedings under sections 11 and 13 of the Housing Act, 1936:

(1) Number of dwelling-houses in respect of which Demolition Orders were made ... 5

(2) Number of dwelling-houses demolished in pursuance of Demolition Orders ... 1

(d) Proceedings under section 12 of the Housing Act, 1936:

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ... 2

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ... —

4. *Housing Act, 1936, Part IV.—Overcrowding:—*

(a) (i) Number of dwellings overcrowded at the end of the year ... 37

(ii) Number of families dwelling therein ... 39

(iii) Number of persons dwelling therein ... 214

(b) Number of new cases of overcrowding reported during the year ... 13

(c) (i) Number of cases of overcrowding relieved during the year (22 Council, 59 others) ... 81

(ii) Number of persons concerned in such cases (214 Council, 377 others) ... 591

(d) Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding —

(e) Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report:

Overcrowding is discussed in a subsequent section.

Housing Inspection.

In section 1 of the preceding table there are details of the inspection of dwelling-houses during the year, together with the number of houses found defective; in sections 2 and 3 information is given of the number of houses rendered fit after the defects had been remedied.

In addition, two cottages (8 and 9 Higher Terrace Mews) were closed by agreement and were converted into stores, in one (4 Higher Terrace Mews) an undertaking was given not to use the premises for human habitation, one basement room (24 Princes Road East) was closed, an attic room at 3

Brunswick Terrace was closed owing to inadequacy of floor space and light, a loft at Luckham's forge occupied by a single man was closed, an undertaking being given not to use the premises for human habitation, and 5 Pavor Cottages, St. Marychurch, which was under consideration last year was closed and eventually demolished.

It will be seen that repairs to the various properties inspected have for the most part been carried out; but there are still a number requiring some expenditure to make them in all respects fit for habitation. The owners of these are not in a financial position to carry out the work, and unless some assistance is given the property will continue to deteriorate, with unfortunate consequences to all concerned. Where suitable the reconditioning of much of this old property is of considerable help in meeting the needs of a number of people; and there is an additional advantage that the dwellings are within easy reach of the tenants' place of employment.

New Houses Erected.

During the year 162 new houses were completed for occupation by private enterprise, these comprised 59 small houses of a type suitable for the working classes, 93 medium sized dwellings and 10 large houses. Included in the total are 12 bungalows, 10 flats and 3 shops with dwelling accommodation. Compared with the year 1936 when 291 new houses were erected, the decrease indicates a more normal state of the building trade, a fact which in many ways is to be welcomed.

No houses were built by the Corporation during the period under review; although since 1920 the Corporation have erected 637 dwelling-houses, the supervision and control of which are vested in the Borough Engineer's Department.

Future Housing Requirements.

During the year, however, the recently acquired land in the Watcombe area was laid out, and roads, sewers and other services constructed; the site is thus fully prepared for the erection of houses, and the Housing Committee have decided to proceed with 188 dwellings. It is gratifying that 40 of these are to be four-bedroomed houses which will further

diminish overcrowding. And 12 houses are to be one-bedroomed dwellings situated in a convenient section of the estate and suitable for older people; this is an excellent provision, because in the natural desire to assist the younger families the claims of the older persons have had to be subordinated. The remaining 136 houses will be three-bedroomed dwellings.

House Property Manager.

During the year a memorandum was submitted by the Medical Officer of Health recommending a house property manager system on the Octavia Hill principles; but unfortunately it was resolved that no action be taken.

The memorandum pointed out that the management of housing schemes erected by a Local Authority involves not merely the collection of rents and the maintenance of property, but also the consideration of human and social needs. It may be said that generally speaking the earlier methods have been extremely variable, often with divided management and with unsuitable administrative arrangements; but there has been a growing sense of public responsibility for social well-being, and an appreciation of the fact that it is essential to watch and guide the progress of individual families is leading the progressive Local Authorities to consider and to adopt a definite system of house property management.

It may be said that while it is the duty of Housing Committees to provide houses, this is not enough; and it needs a woman house property manager to help the tenants to turn these *houses* into *homes*. And it is scarcely necessary to emphasise the profound and far-reaching influence of a good home. The critic will say that it is impossible to alter and to improve most working-class mothers, therefore it is wasteful, costly and useless to appoint a manager; the same critic presumably would prohibit medical practice until doctors could unfailingly cure every illness and unfailingly prevent every disease. And the fact remains that the woman property manager system is no longer on trial; it has passed the experimental idealist stage and it has proved its value to an increasing number of progressive Local Authorities.

Octavia Hill herself in evidence before a Royal Commission many decades ago said that persons who worked among the poor should have a sympathetic appreciation of the needs of the people and a kindly understanding of their difficulties. And if this is so, then it requires no eloquent advocate to plead their cause and to submit the recommendation for the appointment of a woman house property manager.

Overcrowding.

The necessary information was obtained, by the overcrowding survey, together with measurement of rooms where required, for the permitted number to be inserted in the rent book of each tenant, in accordance with the provisions of the Act. The appointed day was fixed for 1st January, 1937, in the case of most areas, including Torquay; and after that date the new code relating to overcrowding has been in operation. It should be emphasised that the main object is to prevent the occurrence of overcrowding; and it is hoped that this will be reflected in a great improvement of the conditions under which many people have to live.

During the year considerable progress was made in dealing with the larger families (of over 7 persons) found to be overcrowded at the time of the survey. Both at the Hele Housing Estate and in the St. Marychurch Road, Corporation flats were converted into single houses with five bedrooms; and in this way 13 families comprising 141 persons were rehoused under very satisfactory conditions, which included adjusted rents. This was an important endeavour to prevent the beneficial effect of better housing being offset by a severe reduction in the amount of money left for food and other essential requirements.

The total number of cases relieved of overcrowding during the year was 81 families comprising 591 persons.

As soon as the Watcombe houses are built, further progress will be made in abating overcrowding; for there still remain 39 families (214 persons) living in overcrowded conditions.

These proposals will be seen to deal chiefly with the two aspects of overcrowding, most acute, yet most easily attacked—namely, the larger families in Corporation houses and the larger families in other dwellings. Economic difficulties will almost certainly prevent these people from being suitably housed without State assistance, whereas the smaller families can reasonably be expected to be offered alternative accommodation in existing or future vacancies.

Overcrowding has always been recognised as exerting an extremely deleterious effect on the health of the people, for it is the greatest evil of urbanisation. The Housing Act and the present scheme offer unique opportunities for the Local Authority of a town like Torquay where the problem is not so immense as to be impracticable, to deal boldly with it and make yet another great advance.

Licences for Temporary Overcrowding.

The Housing Act gives a Local Authority power, on the application of an occupier or intending occupier of a dwelling-house, to issue a licence allowing that dwelling-house to be occupied for a limited period by a number of persons in excess of the permitted number for the house. The Act contemplates that the circumstances of a holiday resort may be such as to require the issue of licences on rather a large scale.

In all cases where a licence is issued it is important to ensure that it is so framed as to permit only the minimum amount of overcrowding for the shortest possible time; and in holiday resorts special care must be taken, so that primary regard is given to the occupier's own family and the accommodation available to them.

To enable the issue of licences to be granted uniformly and with the minimum delay, the Medical Officer of Health recommended that the following standard be adopted:—

(1) Licences only to be issued in respect of any period during July, August and September: not more than the permitted number to be taken at other times.

(2) The maximum number in respect of which a licence should be issued for a particular house to be calculated according to a scale which was made. Further, it was required that the applicant should fill in a form indicating how the persons are to be accommodated.

During the year, six applications were received for temporary licences, which were granted.

So far as the corporation houses are concerned, no tenant may take a permanent lodger without the written consent of the Housing Committee; and no application is considered unless there is adequate accommodation, taking as the standard the number of bedrooms only, and counting persons as individuals. But in the summer for a few weeks corporation tenants are allowed to take in temporary visitors up to the permitted number in the rent book.

After all, the tenant has been given a corporation house for the benefit of himself and his family, so that they may keep healthy and strong; if the house is allowed to become overcrowded all these benefits are thrown away and lost.

Community Centres.

We all complain of the shortness of time, said Seneca, but yet have much more than we know what to do with; our lives, he said, are spent in doing nothing at all, or doing nothing to the purpose, or doing nothing that we ought to do. And that ancient philosopher was stating a problem peculiarly appropriate to the present time. For the correct use of leisure is increasingly urgent in days when hours of work tend to decrease and when, tragically enough, unemployment has a large apparently irreducible minimum. The place of a Community Centre is therefore indispensable in modern life to enable people to spend their spare time to a double useful purpose—useful to themselves as individuals and useful to the Town by developing a community spirit of mutual understanding and tolerance.

But there is more than that; for to the younger persons and to the juveniles it provides the simplest and surest remedy for traffic dangers (most frequent in the early evening) and for

the tendency towards juvenile delinquency which has its special perils. Better housing alone seems insufficient to keep these adolescents in when darkness falls; and any measures which can prevent the slippery and fatally easy path to anti-social behaviour or ultimate crime are surely to be welcomed.

And concerning the benefit to physique there is little need to emphasise the importance of these centres, at a time when national fitness is occupying the earnest attention of His Majesty's Government, of Local Authorities, of the Medical Profession and of the Public alike.

Community Centres will have, then, a place of increasing importance in the national life; and should include facilities giving a wide range of opportunity for social enjoyment and the pursuit of leisure-time interests, which adequate premises and proper equipment alone make possible. A community centre should provide a public hall, a gymnasium, a swimming bath (where practicable), common room, reading room and meeting room for adults, a workshop with woodstore, games room, crafts' room, rooms for general purposes for juveniles, a canteen or kitchen, cloak-room and lavatory accommodation and a warden's room.

Following a memorandum by the Medical Officer of Health, recommendations were approved for a Community Centre to be provided on a site in Hele Road to serve the Barton and Hele Estates; and it is anticipated that a second centre will be established at Watcombe as soon as the number of houses erected justify the provision, for which a site has been reserved.

By these measures, yet another most beneficial and invaluable piece of social welfare is being inaugurated.

Section E.

INSPECTION AND SUPERVISION OF FOOD.

(*a*) *Milk Supply : Milk and Dairies Order, 1926.*

(i) *Source of Supply.*

The main source of supply is produced at farms within a radius of 15 miles of the Borough, but during the summer season a certain amount comes from the neighbouring counties of Cornwall, Somerset and Dorset.

(ii) *Producers in the Borough.*

At the end of the year there were 23 cowsheds within the Borough ; the size of these differ greatly, the number of cows kept varying from 3 at two farms to 55 at the largest establishment. The total average number of cows on these farms is 343, and the health, cleanliness and condition of the animals can be considered satisfactory ; for although the designated milk producer understands the need of the hygiene of both the cows and the cowsheds, the regular inspection and the bacteriological examination of the milk tend to keep the unprogressive producer from too much backsliding.

The structural condition of the cowsheds varies considerably ; one or two are excellent examples in modern developments, while others are reminiscent of the very distant dim past. Naturally these old buildings do not lend themselves to effective alterations, for being mainly constructed of cob, any attempt at the insertion of new windows and doorways or at the reconstruction of the roof only hastens disintegration ; on the other hand the development of land for building houses is tending automatically to eliminate these unsatisfactory places.

It is gratifying to record that three cowsheds have been reconstructed and one rebuilt ; and others in the Borough will be brought up-to-date unless the land is sold for building purposes.

The Veterinary Inspector, Mr. Charles Masson, M.R.C.V.S., reports :—

"During the year the dairy farmers have been visited three times and a total of 1001 cows examined, 893 being in milk and 108 dry. At these inspections the following conditions were discovered; 20 cases of mastitis, 1 hard udder—Tuberculosis negative, 1 thin animal and 1 actinomycosis—Tuberculosis negative.

Two herds have been Tuberculin-Tested; there is one Tuberculin-Tested milk producer and there are five Accredited milk producers.

On the whole there has been an improvement in the health and cleanliness of the cows and cowsheds."

(iii) *Dairies.*

There are 79 registered dairymen or purveyors in the Borough, and this number includes four who are also wholesale agents. One business changed hands during the year and no new business was opened.

Frequent inspections are made of the dairies and utensils, and apart from failure to cover cream or milk, the regulations are satisfactorily carried out.

(iv) *Bacteriological Examination of milk.*

As far as possible most samples taken for bacteriological examination are obtained from the churns of the producers at the time of delivery to the retailer; this assures that the milk has not been subject to any contamination subsequent to production.

The regular examination of milk has been carried out in the Town Hall laboratory for a number of years; during 1937 examinations were made of 22 samples of Certified milk, 25 samples of Tuberculin-Tested milk, 139 samples of Pasteurised milk (including 74 samples supplied to the Elementary and Grammar Schools) and 13 samples of undesignated milk.

The results obtained show that in 21 out of 22 samples of certified milk B. coli was absent in one-hundredth ml. and the mean count was 545 per ml.; in 22 out of 25 samples of T.T. milk B. coli was absent in one-hundredth ml. and the mean count was 2442 per ml. The other samples failed on the B. coli test. It was not possible to carry out the methylene blue test on all samples; but in addition to the inspections and bacteriological examinations, the chemical phosphatase test has been carried out on pasteurised milk samples.

In the case of pasteurised milk, 74 samples as supplied to the elementary schools showing a mean count of 1897, and 45 other samples gave a mean count of 1203. 19 samples failed on the B. coli test. During the year 119 samples of pasteurised milk were tested by the chemical phosphatase test and 14 failed to pass; in 10 of the failures an examination of the temperature recording charts showed that the milk had not been kept at the necessary temperature for the full 30 minutes.

The mean percentage of fat in 179 samples was 3.8.

As arranged with the Devon County Council, four samples of milk each week were sent to the County Bacteriologist, Exeter, for examination; in all 227 samples were sent, of which 92 were taken at the local farms at the time of production.

The following is the table of results:—

Designation	No. of samples	Methylene Blue test		B. Coli test		Plate count	
		Passed	Failed	Passsd	Failed	Passed	Failed
T.T. Certified	3	1	2				
T.T.	20	8	12				
Accredited	32	11	21				
Pasteurised	2						2
Non-designated milk	170	42	123	1	4		

It is interesting to note the difference between the results of the Methylene Blue test and of the B. coli test. In the case of those samples of non-designated milks in which both

tests were carried out, of 21 samples which passed the Methylene Blue test, 20 passed the B. coli test and 1 failed, while of 45 samples which failed in the Methylene Blue test 26 passed the B. coli test and 19 failed. In the total of designated milks 13 samples which passed the Methylene Blue test also passed the B. coli test, while of 16 which failed in the Methylene Blue test, 4 passed the B. coli test and 12 failed.

The percentage of failures (72 per cent) shows how sensitive is the Methylene Blue test, for the failures in the preceding 5 years, under the former tests, ranged from 23 per cent to 41 per cent.

Comments on bacteriological examination of milk.

In the bacteriological grading of milk, what is required is a simple inexpensive test with a small experimental error, which can be used on a large scale by relatively unskilled workers. The modified Methylene Blue reduction test fulfils these requirements and moreover has two advantages over the plate count; the first is that the result of the reduction test does not appear to be seriously affected by the degree of aggregration of the bacteria in milk, while the plate count depends very largely on the amount of clumping. A milk in which the organisms are distributed mainly in small groups may have a plate count very much higher than that of another milk having the same number of organisms which are arranged in large clumps.

The second advantage is that the reduction test is considerably more sensitive to the growth of bacteria than is the plate count. After production of milk there is a lag phase during which, under favourable conditions, there is bacterial growth without actual multiplication; during this phase the organisms become larger, are actively respiring and are preparing for rapid division. Until division takes place the plate count undergoes no marked alteration and so the plate count cannot distinguish between the beginning and the end of the lag phase; but since the organisms are using up

oxygen by actively respiring, there is during the lag phase a considerable fall in the reduction time as gauged by the Methylene Blue test. This differentiation is important because it is obvious that the keeping quality of the milk is much less at the end of the lag phase than at the beginning of that period of active growth.

The B. coli test has disadvantages when applied to routine milk examinations. In the first place a considerable proportion (from 50 to 70 per cent) of coliform organisms in raw milk are not of the true *coli* type, but of the *aerogenes-cloacae* type coming from soil and grain; their presence in milk cannot be regarded as an index of excretal pollution. Further the true coli organisms found in milk appear to come either directly from cow dung and manure, or indirectly from utensils which have not been sterilised or in which bacterial multiplication has occurred; and thirdly, milk is such a suitable medium that growth of the coli organisms may be considerable within a short time.

This test therefore has irregular results, not well correlated with the sanitary conditions of production or with the keeping quality of the milk.

So far as bacterial cleanliness of milk is concerned, it is probable that the Methylene Blue test will help to raise the standard of cleanliness, because it should be possible to examine more samples, and because it is peculiarly fitted for gauging the keeping quality of the milk. And when the cleanliness of the milk is more satisfactory, then pasteurisation (which is recognised by scientific authorities as being essential for ensuring a safe milk) will be correspondingly easier.

(v) *Special Bacteriological Examination for Tuberculosis.*

During the year 13 samples of milk were taken for examination for the presence of B. Tuberculosis; all were found to be negative.

(vi) *The Milk (Special Designations) Order, 1936.*

Under this Order the special designations of milk are:—

(*a*) *Tuberculin-Tested.*

This is milk from cows which have passed a veterinary examination and a tuberculin test, and it may be bottled on the farm or elsewhere.

If raw it must satisfy a prescribed Methylene Blue reduction test, *i.e.*, when tested in accordance with this method the sample must not decolourise Methylene Blue within 4½ hours if the sample is taken at any time from 1st May to 31st October or within 5½ hours if the sample is taken from 1st November to 30th April. The milk must contain no coliform bacillus in one-hundredth ml.

If pasteurised it must be described as "Tuberculin-Tested Milk (Pasteurised)," and must not contain more than 30,000 bacteria per ml.

If it is bottled on the farm the word "Certified" may be added.

(*b*) *Accredited.*

This is raw milk from cows which have passed a veterinary examination; it may be bottled on the farm or elsewhere, and it must satisfy the same bacteriological tests as are prescribed for raw T.T. milk.

(*c*) *Pasteurised.*

This is applicable both where accredited and where ungraded milk are pasteurised, *i.e.*, the milk has been retained at a temperature of 145 deg. F. to 150 deg. F. for at least 30 minutes, and immediately cooled to a temperature of not more that 55 deg. F. The milk must not be heated more than once, and indicating and recording thermometers are necessary; temperature records must be kept for one month. The milk must not contain more than 100,000 bacteria per ml.

The licensing authority for producers of T.T. and Accredited milk is the County Council, and the licensing authority for producers of pasteurised milk is the Borough Council ; the licensing of dealers in designated milk rests with the Borough Council.

In Torquay the following licences were granted :—

	Producers	Purveyors
T.T. Certified	-	15
T.T.	1	9
Accredited	5	-
Pasteurised	4	11

Frequent inspections of licensed pasteurising establishments are also made with a view to ascertaining that the requirements of the Order, both as to apparatus and as to methods, are being complied with and are working in a uniformly satisfactory way.

In addition to the inspections and bacteriological examinations, the chemical phosphatase test was used in routine work.

(*b*) *Meat and Other Foods.*

(i) *Inspection of Meat.*

Nothing of outstanding note has occurred during the year. On the whole there has been little difficulty in the administration of the Public Health (Meat) Regulations 1924 ; but there is still a tendency on the part of a minority of tradesmen to expose meat and bacon in the open window.

Meat is retailed from carts in a few cases ; and while the cleanliness of the vehicles and the class of food purveyed are satisfactory, it is not a method to which approval can be given from a public health point of view.

All the slaughterhouses are visited each day, including Sundays and Bank Holidays ; in all 2,309 visits were made to these premises by the Inspectors examining carcases. The Senior Inspector also supervises the slaughter of animals at two slaughterhouses in the rural area by arrangement with the Newton Abbot Rural District Council ; 386 visits were paid to these premises and 694 carcases were examined.

The subjoined tables give the number of carcases examined in the different slaughterhouses :—

NUMBER OF CARCASES EXAMINED IN THE DIFFERENT SLAUGHTERHOUSES IN THE BOROUGH

No.	Bullocks	Cows	Heifers	Sheep and Lambs	Pigs	Calves	Total	Visits
1 ..	45	3	60	620	573	14	1315	302
2 ..	8	15	30	338	112	22	525	243
3 ..	13	-	25	109	40	3	190	283
4 ..	141	2	99	757	1089	122	2210	373
Abattoir	249	65	384	4970	3244	1372	10284	899
6 ..	28	1	57	714	262	146	1208	209
Totals ..	484	86	655	7508	5320	1679	15732	2309

NUMBER OF CARCASES EXAMINED IN THE DIFFERENT SLAUGHTERHOUSES OUTSIDE THE BOROUGH

	Bullocks	Cows	Heifers	Sheep and Lambs	Pigs	Calves	Total	Visits
A .	3	-	47	232	-	-	282	192
B ..	10	1	30	215	156	-	412	194
Totals ..	13	1	77	447	156	-	694	386

The number of carcases examined in shops was 31,479. These include chilled carcases together with many home dressed carcases which would previously have been examined in the slaughterhouse; and the total number of carcases examined in both shops and slaughterhouses was 47,905.

The number of entire carcases destroyed is given in the following table, showing the number condemned for tuberculosis and for diseases other than tuberculosis:—

ENTIRE CARCASES DESTROYED

Tuberculosis	..	2	Heifer's carcases	..	1200 lbs.
,,	..	1	Calf's carcase	..	60 ,,
,,	..	4	Pigs' carcases	..	368 ,,
Swine Fever	..	9	,, ,,	..	764 ,,
,, Erysipelas	..	1	,, carcase	..	80 ,,
Inflammation	..	1	,, ,,	..	45 ,,
Septic Pleurisy	..	1	,, ,,	..	160 ,,
Injury	..	1	,, ,,	..	63 ,,
Peritonitis, septic	..	1	,, ,,	..	35 ,,
Pneumonia, etc.	..	8	,, carcases	..	300 ,,
Septic Pericarditis	..	2	Calves' carcases	..	140 ,,
Jaundice	..	1	Calf's carcase	..	60 ,,
Suffocated	..	1	,, ,,	..	75 ,,
Unsound	..	4	Sheep's carcases	..	200 ,,
Septic Pleurisy	..	1	,, carcase	..	50 ,,
Dropsy	..	1	Lamb's ,,	..	25 ,,
		39			3625 lbs.

The subjoined table gives the parts of carcases or organs which were condemned, showing the number affected with tuberculosis and with diseases other than tuberculosis :—

Diseased or Unsound Meat Destroyed.

Organs, etc. Destroyed.		Diseases.												
		Tuberculosis.	Flukes.	Cirrhosis.	Abscess.	Cysts	Strongyli.	Inflammation.	Pleurisy and Peritonitis.	Injury.	Actinomycosis	Unsound.	Others.	Totals.
Beasts :	Lungs ..	6	-	-	5	-	-	3	1	-	-	-	-	15
	Livers ..	8	120	78	-	-	-	-	-	-	-	2	2	210
	Tongues ..	-	-	-	-	-	-	-	-	-	1	-	-	1
	Heads ..	6	-	-	1	-	-	-	-	-	7	-	-	14
	Carcases ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Cows :	Lungs ..	5	-	-	1	-	-	1	-	-	-	-	-	7
	Livers ..	3	10	20	-	-	-	-	-	-	-	-	-	33
	Tongues ..	-	-	-	-	-	-	-	-	-	-	-	-	-
	Heads ..	5	-	-	-	-	-	-	-	-	-	-	-	5
	Carcases ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Heifers :	Lungs ..	15	-	-	3	1	-	4	1	-	-	2	1	27
	Livers ..	12	117	83	3	-	-	-	2	-	-	-	-	217
	Tongues ..	-	-	-	-	-	-	-	-	-	-	-	-	-
	Heads ..	11	-	-	-	-	-	-	-	-	1	-	-	12
	Carcases ..	2	-	-	-	-	-	-	-	-	-	-	-	2
	Parts of ditto	1	-	-	-	-	-	-	-	-	-	-	-	1
Calves :	Carcases ..	1	-	-	-	-	-	-	-	-	-	-	4	5
Sheep :	Lungs ..	-	-	-	27	80	218	45	35	2	-	1	5	413
	Livers.. ..	-	184	-	330	1	-	2	3	1	-	1	10	532
	Heads ..	-	-	-	-	-	-	-	-	1	-	-	-	1
	Carcases ..	-	-	-	-	-	-	-	1	-	-	4	1	6
	Parts of ditto	-	-	-	-	-	-	2	-	1	-	-	1	4
Pigs :	Lungs ..	79	-	-	33	9	23	220	146	9	-	8	35	562
	Livers ..	58	-	85	5	2	-	34	13	7	-	5	15	224
	Heads ..	602	-	-	3	-	-	-	-	1	-	1	1	608
	Carcases ..	4	-	-	-	-	-	1	10	1	-	-	10	26
	Parts of ditto	2	-	-	-	-	-	-	-	-	-	-	-	2
Other Organs :														
	Mesenteries ..	226	-	-	-	-	-	4	12	1	-	-	16	259
	Spleens ..	27	-	-	-	-	-	3	12	-	-	-	7	49
	Stomachs ..	13	-	-	-	-	-	3	11	-	-	-	7	34
	Kidneys ..	-	-	-	-	65	-	-	1	-	-	-	-	66
	Miscellaneous	45	-	-	15	3	-	80	91	-	-	311	11	556
Chilled Meat		-	-	-	-	-	-	-	-	70	-	77	8	155
Totals ..		1131	431	266	426	161	241	402	339	94	9	412	134	4046

CARCASES INSPECTED AND CONDEMNED

Number killed (if known)	Cattle, excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
	It is not possible to give separate figures here, but not more than about 25 animals are slaughtered and sold without inspection during the year				
Number Inspected ..	1229	87	1679	7955	5476
ALL DISEASES EXCEPT TUBERCULOSIS					
Whole carcases condemned ..	—	—	4	6	22
Carcases of which some part or organ was condemned ..	404	30	2	532	483
Percentage of the number inspected affected with disease other than tuberculosis ..	32.9	34.5	0.4	6.8	9.2
TUBERCULOSIS ONLY					
Whole carcases condemned ..	2	—	1	—	4
Carcases of which some part or organ was condemned ..	23	5	1	—	598
Percentage of the number inspected affected with tuberculosis ..	2.0	5 8	0.1	—	11.0

The weight of diseased or unsound meat destroyed is as follows:—

	Tons	cwts.	qrs.	lbs.
Voluntarily surrendered ..	3	3	1	6½
Surrendered (after inspection) ..	9	6	2	24½
Seized	—	—	—	—
	12	10	0	3

The premises, on which the diseased or unsound meat was found, are shown below:—

Place	Seized	Weight lbs.	Voluntarily Surrendered	Weight lbs.	Surrendered on Request	Weight lbs.	Total Weight lbs.
			T.B.20	175½	T.B. 2	22	197½
Shops ...	—	—	2	20	513	1624	1644
Slaughter-houses	—	—	—	—	T.B.1109	10601	10601
					2307	9665½	9665½
Siding ...	—	—	147	2415	—	—	2415
Other Places	—	—	—	4480	—	—	4480
Totals ...	—	—	173	7090½	3931	21912½	29003

(ii) *Inspection of Other Foods.*

Periodical regular inspections are made by the Sanitary Inspectors of all foodstuffs in shops, on hawkers' barrows and in stalls in the Market; routine visits are paid in the early morning to the Fish Quay, and the cargoes of vegetables landed at the harbour are also inspected.

Other food condemned included :—

	No. of articles	Weight in lbs.
Rabbits	28	33½
Fowls	3	10
Butter, case	1	142
,, box	1	5
Cheese	4	72
Brussel Sprouts, bag	1	8
Cordials, Pickles, Vinegar ..	—	4480
Tinned goods: Tongue ..	3	24
Vegetables ..	7	9½
Pickles	2	2
Jam	20	35½
Fish	15	13½
Total		4835 lbs.

All unsound and diseased food is destroyed in the Corporation Refuse Destructor.

Ice Cream.

Particular attention is paid to ice cream and 48 samples were examined bacteriologically at the Town Hall Laboratory with these results :—

Number of samples	Mean Bacterial Count per ml.	B. Coli present or absent in 1 ml.	1/10 ml.
5	Too numerous to count	+	+
25	1211	+	+
18	2190	—	—

During the summer there were 60 retailers and six wholesale agents on the register.

Although there are 32 tradesmen who make their own ice cream, the tendency now is to purchase from the wholesale firms, which tends to ensure a higher standard of goods and, from the public health point, is more satisfactory.

2. *Inspection of Premises.*

(i) *Slaughterhouses.*

There are six private slaughterhouses, five being licensed annually and one registered—the so-called public abattoir.

(ii) *Necessity for improved Slaughterhouse Accommodation.*

The provision of an up-to-date Public Abattoir is urgently required; much of the present overhead gear and other fittings have been in constant use for the past seventy years, and little more need be said to emphasise that a complete modernisation of building and equipment should be undertaken at the earliest opportunity. A well equipped abattoir would be in the interests of all concerned—of the trade, of the administration of food inspection, of the Public Health and of the animals; and it is hoped that this matter will receive favourable consideration during the coming months.

(iii) *Slaughter of Animals Act, 1933.*

This Act came into operation at the beginning of 1934; it is now an offence to slaughter any animal in a slaughterhouse or knacker's yard unless it is first stunned by a mechanically operated instrument in proper repair. Thirty-seven applications were received from slaughtermen for a licence to slaughter animals, and all were granted after due enquiry had been made.

No legal proceedings were taken, but one man was cautioned by the authority for slaughtering a sheep without first stunning the animal by a mechanically operated instrument.

There is no excuse whatever for such conduct and leniency will not be extended to those who retain barbarous methods and have insufficient sense to comply with the regulations.

(iv) *Inspection of places where food is prepared.*

The inspection of dairies was dealt with in Section E (*a*) and the inspection of slaughterhouses in Section E (*b*) 2.

Regular inspections are made of all other premises where food is prepared or stored, and the following is a record of the visits :—

Butchers' Shops	..	..	5210
Butchers' Carts	..	..	171
Fish Quay	..	..	170
Railway Siding	..	..	121
Market Hall	..	..	132
Other Shops	..	..	1422
Bakehouses	..	..	124
Fish and Chip Shops	..	..	82
Ice Cream Shops	..	..	93
Tripe Dressers	..	..	54
Cafés, etc.	..	..	66

These premises have been found, almost without exception, to be clean ; but concern must be felt, however, owing to the lack of precautions taken to protect foodstuffs from flies, from dust and from general contamination by droplet infection from human beings - such as occurs in coughing, sneezing, blowing, or even talking when food is uncovered.

Many high-class provision dealers provide a glass screen at the front of the counter or cover the food with transparent paper ; and with the various methods available, is is hoped that improvements will steadily evolve.

Too much cleanliness and care cannot be taken in all places where food is prepared or stored.

(v) *Kitchens of Hotels, etc.*

Under the Torquay Corporation Act, 1923, inspection of these premises is empowered, and regular visits are paid to examine the kitchens and larders of hotels, boarding houses, cafés and tea rooms ; on the whole these are found in a satisfactory condition, many of the larger hotels having up-to-date hygienic equipment.

(c) *Adulteration of Food.*

The Food and Drugs (Adulteration) Act, 1928, the Artificial Cream Act, 1929, the Public Health (Condensed Milk) Regulations, 1923 and 1927, the Public Health (Dried Milk) Regulations, 1923 and 1927, are administered by the County Council. Through the courtesy of Superintendent Martin of the County Police, the following particulars are available showing the 35 samples of food submitted to the Public Analyst.

Nature of Sample	Number genuine	Adulterated
Butter ..	4	—
Ground Coffee ..	1	—
Cream ..	2	—
Ground Ginger ..	1	—
Margarine ..	3	—
New Milk ..	16	—
Pepper ..	2	—
Honey ..	1	—
Boiled Sweets ..	1	—
Tapioca ..	1	—
Vinegar ..	1	—
Whiskey ..	2	—

(*d*) *Chemical and Bacteriological examination of Food.*

The analyses of milk have already been described in Section E (*a*) iv. A certain amount of bacteriological or chemical examination was carried out at the Town Hall Laboratory in connection with meat and other foods as follows :—

For Tuberculosis (microscopically)	18
Actinomycosis	4
Fat for Jaundice	8
Unsound Tinned Food ..	3
Unsound Beef	2
Pneumonia	2
Pericarditis	2
Swine Erysipelas	2
Diseased Kidneys	6

(*e*) *Nutrition :—Dissemination of knowledge and particulars of any special work on the subject of nutrition.*

In addition to the routine individual advice given by the Medical Officers and Health Visitors on food values and diet, which has been previously stated (in Section B 3 iii.) is one of the most effective ways of improving the nutrition of the people, the Medical Officer of Health gave several addresses to scientific societies and to social organisations like the Torquay Women's Council, Inner Ring of the Rotary Club, Co-operative Guilds, Townswomen's Guilds, etc.

(*f*) *Shell-fish* (*molluscan*).

(i) *Any information concerning the places to which shell-fish taken from layings in the district are sent to be marketed.*

There are no shell-fish beds or layings in the area.

(ii) *The layings from which shell-fish* (*specifying the kinds of shell-fish*) *which may be marketed in the district, are derived.*

Lobsters and crabs are caught locally and are disposed of in the district; small shell-fish such as oysters, cockles, winkles, etc., come by train from London markets.

Section F.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES.

Notifiable Diseases.

In 1937 the following were the notifiable infectious diseases in Torquay :—

Smallpox
Scarlet fever
Diphtheria and Membranous Croup
Erysipelas
Enteric fever (including Para-typhoid fever)
Typhus fever
Relapsing and continued fever
Tuberculosis (all forms)
Ophthalmia neonatorum
Cerebro-spinal fever
Acute poliomyelitis
Acute polioencephalitis
Encephalitis lethargica
Acute primary pneumonia
Acute influenzal pneumonia
Puerperal fever
Puerperal pyrexia
Cholera
Plague
Dysentery
Malaria
Trench fever

No other diseases were added to this list by the action of the Local Authority.

1. Notifiable Diseases (other than Tuberculosis).

The incidence of notifiable disease *during the 52 weeks ended 1st January, 1938*, is shown in the three subjoined tables; the first table sets out the total notifications, with the number of cases admitted to Hospital and the total deaths, while the second table shows the distribution according to age, and the third gives the incidence in the various wards of the Borough.

Disease	Total cases notified	Cases admitted to Hospital	Total Deaths
Smallpox	—	—	—
Scarlet fever	91	75	—
Diphtheria	35	35	3
Enteric fever (including Para-typhoid)	3	3	—
Puerperal fever	5	5	1
Puerperal pyrexia	8	7	—
Pneumonia	35	20	46
Cerebro-spinal fever	—	—	—
Erysipelas	7	1	—
Ophthalmia neonatorum ..	4	4	—
Acute poliomyelitis	3	2	3
Acute polioencephalitis ..	1	1	—
Encephalitis lethargica ..	2	2	1
Dysentery	1	—	—

Disease	Age Groups												Total Cases Notified
	Under 1 year	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	65 and over	
Smallpox	-	-	-	-	-	-	-	-	-	-	-	-	—
Scarlet fever ..	1	1	5	9	4	38	15	2	12	2	2	-	91
Diphtheria	-	-	2	2	3	18	5	4	1	-	-	-	35
Enteric fever (including Para-typhoid)	-	-	-	-	-	1	-	-	2	-	-	-	3
Puerperal fever ..	-	-	-	-	-	-	-	-	3	2	-	-	5
Puerperal pyrexia ..	-	-	-	-	-	-	-	-	6	2	-	-	8
Pneumonia	3	5	-	-	-	-	2	1	4	3	11	6	35
Cerebro-spinal fever ..	-	-	-	-	-	-	-	-	-	-	-	-	—
Erysipelas	-	-	-	-	1	-	1	-	-	-	3	2	7
Ophthalmia neonatorum	4	-	-	-	-	-	-	-	-	-	-	-	4
Acute poliomyelitis ..	-	-	-	-	-	-	1	-	2	-	-	-	3
Acute polioencephalitis	-	-	-	-	-	-	-	1	-	-	-	-	1
Encephalitis lethargica	-	-	-	-	-	1	-	-	-	-	1	-	2
Dysentery	-	-	-	-	-	-	-	-	1	-	-	-	1
Totals	8	6	7	11	8	58	24	8	31	9	17	8	195

Disease	Wards									Total	Cases removed to Hospital
	Torre	Waldon	Upton	Ellacombe	Strand	Torwood	St. Marychurch	Babbacombe	Chelston		
Smallpox	-	-	-	-	-	-	-	-	-	—	—
Scarlet fever ..	17	6	12	18	3	2	21	2	10	91	75
Diphtheria	3	2	6	5	2	1	14	-	2	35	35
Enteric fever (including Para-typhoid)	2	-	-	-	-	-	-	1	-	3	3
Puerperal fever ..	-	-	-	-	-	1	-	-	4	5	5
Puerperal pyrexia ..	1	-	-	-	-	-	-	-	7	8	7
Pneumonia	3	1	2	10	2	1	1	1	14	35	20
Cerebro-spinal fever ..	-	-	-	-	-	-	-	-	-	—	—
Erysipelas	-	1	-	2	-	1	-	2	1	7	1
Ophthalmia neonatorum	1	-	-	-	1	-	1	-	1	4	4
Acute poliomyelitis ..	-	-	-	-	-	-	-	1	2	3	2
Acute polioencephalitis	-	-	-	-	-	-	-	1	-	1	1
Encephalitis lethargica	-	-	-	-	-	-	-	1	1	2	2
Dysentery	-	-	-	1	-	-	-	-	-	1	—
Totals	27	10	20	36	8	6	37	9	42	195	155

The following information was received from Head Teachers, showing the extent of school intimations of disease:—

Measles ..	..	22
Whooping cough	..	30
Mumps ..	..	37
Chickenpox ..	..	11
Scarlet fever ..	..	10
Diphtheria ..	..	2
		112

A short epidemiological section is given below dealing with the more important diseases:

(*a*) *Smallpox.*

There were no cases in 1937.

(*b*) *Scarlet Fever.*

During the year 91 notifications were received, showing a case-rate of 2.04 per 1,000 compared with a case-rate of 2.33 per 1,000 for England and Wales. The notifications for each quarter were 33, 15, 24 and 19; and the rise in the last quarter usually associated with the epidemiology of the disease was not shown. Indeed during the last half of the year, there were probably fewer streptococcal infections than usual, of which scarlet fever is only one manifestion.

It is becoming obvious that traditional terminology has been rigorously maintained, while clinical pathology and science have progressed considerably; and it is now known that one species of streptococcus is responsible for a wide range of diseased conditions, the clinical forms and epidemiological features of which depend upon the virulence, toxicity, and invasive power of the organisms, and upon the susceptibility of the individuals exposed to infection. Thus scarlet fever is an infection of the naso-pharynx with haemolytic streptococci, in which, when the rash is seen, enough soluble toxin is circulated and diffused through the body to dilate the surface capillaries; when there is insufficient soluble toxin to produce a rash, the infection of the throat may still be present and the person may be just as infectious as when the rash is seen. To the epidemiologist, scarlet fever is a definite type of tonsillitis with or without a rash; to the public, scarlet fever is essentially and primarily what it was in the days of Sydenham (the father of English Medicine) a rash with or without a sore throat.

The present system of notifying and of isolating only those patients who show the characteristic rash is quite inadequate and fails to control the disease; some of these cases can quite safely be treated at home, but some need hospital treatment. And institutional accommodation should also be available for the larger group of streptococcal infections where although no rash occurs, the invasive powers or virulence of the organism renders the patient very seriously ill. It is exceedingly difficult to make this generally realised; but it is hoped that there will soon be a more enlightened state of public opinion, in keeping with modern epidemiology.

There was no death from scarlet fever.

(*c*) *Diphtheria.*

There were 35 notifications of this disease spread over the quarters of the year 5, 1, 11, 18. The case-rate was 0.78 per 1,000, compared with 1.49 per 1,000 for England and Wales. The rise in the last quarter was due chiefly to the introduction of diphtheria into a school by a child with conjunctivitis; she was Schick-negative and carrying virulent C. diphtheria in the discharge from the eyes.

There were three deaths; in two cases there had been delay in seeking treatment, and the third death was in a Torquay child resident in an institution outside the Borough.

(d) Enteric Fever.

Three cases were notified during the first and second quarters of the year, the case-rate being 0.07 per 1,000 population, compared with 0.05 for England and Wales. Two of the cases were not clinically very typical and diagnosis was based only on agglutination results; but the third case, a man of 24, was a moderately severe infection from a carrier. There was no death.

(e) Puerperal fever and Puerperal pyrexia.

Five cases of puerperal fever and eight cases of puerperal pyrexia were notified; the five cases of puerperal fever and seven cases of the pyrexia were in, or removed to, Hospital. There was one death. In the cases of puerperal fever, the notifications relate to the 39 weeks ended 1st October, 1937, conditions previously so notifiable being notified subsequently to that date as cases of puerperal pyrexia. The case-rate for puerperal pyrexia, including puereral fever, was 24.43 per 1,000 total (live and still) births, compared with a rate of 13.93 for England and Wales.

Although this points to the assumption that the incidence of puerperal pyrexia is higher in Torquay than in the country as a whole, there are several factors which need to be considered. As the Hospital here takes a number of confinements from areas outside the Borough, the registered births are transferred to the area in which the mother resides while the notification of pyrexia remains; furthermore, a large proportion of the total births in Torquay occur in Hospital, and this tends to a greater completeness of notification than might otherwise obtain. And the fact that there were only just over 500 births makes the case-rate (calculated as it is on total births), liable to wide fluctuations—each notification increasing the rate by approximately 2.

(f) Pneumonia.

Pneumonia, like the streptococcal infections, seemed less prevalent and there were 35 notifications compared with 62 in 1936. The incidence again drifted towards the extremes

of age; eight cases occurred in children under 2 years and 20 were in persons over 35 years of age. No fewer than 17 cases (approximately one-half) were in older people over 45 years—indeed that is what might be expected, for as Osler put it "Pneumonia is the friend of the aged, causing them to escape the cold gradations of decay."

The case-rate was 0.78 per 1,000 population, compared with 1.36 for England and Wales.

(g) Erysipelas.

Seven notifications were received, and one case was removed to hospital: five cases were over 45 years of age. There was no death.

The case rate was 0.16 per 1,000 population, compared with 0.37 for England and Wales.

(h) Ophthalmia Neonatorum.

Four cases were notified, all of whom were removed to hospital. Recovery was complete in each instance and there was no damage to sight.

(i) Acute Poliomyelitis.

During the autumn there was an outbreak of acute poliomyelitis in Devon, in which Torquay shared to the extent of four cases, three being non-residents; the case-rate was 0.09 per 1,000 population. The first case was in a visitor who had only been in the town a few days before the onset of the disease, and was apparently unconnected with any other case; the second was a resident, again apparently quite sporadic, and both these cases were rapidly fatal. The third case was in a boarding school, the child dying within 24 hours of being diagnosed; and the fourth case, in the same school, was severe, of a polio-encephalitic type, but recovered. Full details of the cases were submitted through the County Medical Officer to the Ministry of Health.

The severity of the disease with a rapid fatal termination in three cases was the exceptional feature: it is difficult to explain it by a virus with an exalted virulence, for more cases might then have been expected. It has been suggested that susceptible persons of a particular blood-group are those re-acting severely to the infection; but such a hypothesis requires much work to confirm or reject it.

With the present state of knowledge, acute poliomyelitis, aptly described as one of the most cruel diseases, is also one of the most difficult to control, to prevent, or to treat. The outbreak of 1937 followed a dry summer and autumn, similar to the summer of 1911 when this County previously suffered considerably : this suggests some meteorological feature, although in 1937 the disease was world-wide and occurred in the southern hemisphere at a time not in keeping with its usual autumnal prevalence.

(*j*) *Other notifiable diseases.*

Two cases of encephalitis lethargica, both in hospital, were notified. There was one death.

(*k*) *Other non-notifiable diseases.*

Influenza was very prevalent in the early months of the year, but the type remained mild, and although there were 14 deaths certified, all were over 45 years of age, six being over 75.

The death-rate from influenza was 0.31 per 1000 population, compared with 0.45 for England and Wales.

Whooping Cough was mildly prevalent in the early months of 1937, and some 30 notifications were received from schools : there were three deaths.

Measles was not prevalent in 1937 until the very end of the year, when a few cases heralded the widespread outbreak in the beginning of 1938.

Mumps. There were 37 cases of mumps notified among school children, but there were no serious cases or complications.

Brucella. One case was reported, and recovered very satisfactorily under treatment; the details of the case were submitted through the County Medical Officer of Health to the Ministry of Health.

2. Isolation Hospital Treatment.

The number of cases admitted to the Isolation Hospital during the year, together with the number for the previous year for comparison, is given in the subjoined table :—

		1936	1937
Scarlet Fever	..	87	88
Diphtheria	..	19	35
Cases for observation	..	13	17
Measles	..	2	4
Mumps	..	—	1
Erysipelas	..	2	1
Chickenpox	..	2	1
Septicaemia	..	1	—
Diphtheria carrier	..	—	2
		126	149

There were 15 cases in Hospital at the end of the year.

Scarlet Fever.

Out of the 91 notifications, 75 were removed to Hospital ; the difficulties of replacing Hospital treatment by adequate nursing and supervision at home are increased in a health resort where many visitors are staying, and where many of the residents among the working classes are in trades which involve the handling and preparation of food. Moreover, many of the cases for their own sakes need the necessary careful treatment of Hospital ; although the provision of smaller wards or cubicles would be a great help in preventing the crossing of infection with different strains of haemolytic streptococci.

Treatment by serum is used in toxic cases, and uncomplicated cases are returned home at the end of four weeks or soon afterwards ; it would be unwise to maintain this policy too rigidly, and indeed the physician must always have an equal place with the epidemiologist in the administration of hospital treatment.

Diphtheria.

All cases were admitted to Hospital ; and while the clinical type remains unaltered, several cases, including the two fatal ones, had delayed seeking treatment until late.

Both diphtheria anti-toxin and scarlet fever anti-toxin are provided free of charge to medical practitioners whose patients may be unable to pay for them ; and repetition is needed to emphasise the paramount importance of early treatment.

Observation Cases.

A number of suspicious throats and rashes, and a number of other suspected infectious diseases are admitted; this is especially necessary in a health resort with numerous visitors, and the provision of cubicle blocks will facilitate this work. It will then also be possible to admit cases of measles and whooping cough which are often far more in need of hospital skilled treatment than certain notifiable diseases.

Vaccination.

Through the courtesy of the Vaccination Officer the following is the record of vaccination during the five years, 1932-36 (the averages for the decade 1900-1909 are also shown for comparison) :—

Years.	Total births registered	Successfully vaccinated	Insusceptible of Vaccination	Had Small-pox	Number of Declarations from Conscientious Objectors	Died Unvaccinated	Postponed by Medical Certificate	Removed to other districts the Vaccination Officer of which has been apprised	Removed Address unknown	Percentage successfully Vaccinated	Excluding those who died Unvaccinated. Percentage
1900-1909	578	468	—	—	39	4	6	3	10	82.0	87.0
1932	560	181	5	—	344	16	3	4	5	32.3	29.4
1933	565	169	3	—	335	24	8	3	13	29.91	31.0
1934	552	136	3	—	353	21	4	3	32	24.6	25.6
1935	583	138	3	—	397	13	4	1	25	23.7	24·2
1936	587	133	1	—	397	19	4	4	29	22.6	23.0

The percentage vaccinated has fallen from 87 per cent. (the average for 1900 to 1909) to 23 per cent. in 1936.

Immunisation.

At the Isolation Hospital the nursing and domestic staff are tested for susceptibility to diphtheria and scarlet fever and immunised when necessary.

Two orphanages in the Borough have been immunised against diphtheria, and all new entrants to these homes are tested and similarly protected where necessary.

And a third orphanage was tested and immunised following a case of diphtheria in December; no secondary case arose in this institution.

A few other children have been immunised where the parents have asked for this, and an endeavour has been made to test and immunise all the other children in a house in which a case of diphtheria arises. Parents are usually only too willing for this, and by peaceful penetration it is hoped to pave the way for a campaign to obtain more widspread immunisation. Without some preliminary work, any attempt at insisting on mass inoculation seems to arouse opposition, for negativism is as prevalent in parents as in children; and compulsory vaccination against smallpox seems to have bequeathed an enduring but unwarranted predjudice.

Science has given these invaluable preventive measures, and they are but scantily used. People often say, in epidemic times especially, how much appreciated would be some preventive measures against such as influenza, or it is said how great would be the discovery of the cause of cancer; but in view of the way in which existing discoveries are used, the cynic is tempted to ask if any more are deserved.

4. (*a*) *Prevention of blindness. Particulars should be given of any action taken under Section 66 of the Public Health Act, 1925, or under Seetion 176 of the Public Health Act, 1936, for the prevention of blindness or for the treatment of persons suffering from disease or injury to the eyes.*

Arrangements are in force for the prompt treatment of cases of ophthalmia neonatorum, hospital accommodation under specialist treatment being available for all cases; and the pre-school and school medical services deal with cases of eye defects in children. No special measures have been taken for injuries to adults, because there are no local industries in which these would be specially required.

It cannot however be over-emphasised that "After the early years blindness, apart from accidents, is often due to general disease, and the prevention of blindness to this extent becomes part of preventive medicine. For this reason alone it is highly desirable that persons with defects of sight should seek expert medical advice with a view to finding out whether the cause of such defects is some disorder of general health." This is the considered opinion expressed in their reports by the Prevention of Blindness Committee and the words merit the most careful attention by each individual person.

(*b*) *Tuberculosis. Particulars should be given of any action taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, (relating to persons suffering from pulmonary tuberculosis employed in the milk trade), or under Section 62 of the Public Health Act, 1925, or Section 172 of the Public Health Act, 1936, (relating to the compulsory removal to a hospital of persons suffering from tuberculosis).*

No action was required under this section.

5. *Tuberculosis.*

New cases and mortality during 1937.

Particulars of new cases of tuberculosis and of deaths from the disease in the area during 1937 are given in the following table:—

Age Periods	New Cases.				Deaths			
	Respiratory		Non-Respiratory		Respiratory		Non-Respiratory	
	Male	Female	Male	Female	Male	Female	Male	Female
Under 1 year	-	-	-	1	-	-	-	1
1 to 5 years	-	-	-	-	-	-	1	-
5 to 15 ,,	2	1	2	1	-	-	-	-
15 to 25 ,,	4	15	2	-	-	5	1	-
25 to 35 ,,	7	11	1	2	-	3	1	1
35 to 45 ,,	5	7	-	-	3	3	-	1
45 to 55 ,,	4	-	-	-	4	-	-	-
55 to 65 ,,	5	1	2	-	4	-	-	-
65 & over ..	-	4	-	-	2	2	-	-
Totals	27	39	7	4	13	13	3	3

The death-rate for respiratory tuberculosis in Torquay was 583 per million population, compared with a rate of 584 for England and Wales; and the death-rate for other forms of tuberculosis was 134 per million, compared with a rate of 111 for England and Wales.

The number of cases on the Tuberculosis Register at the end of the year was:—

	Male	Female	Total
Respiratory	202	164	366
Non-Respiratory	38	28	66
	240	192	432

The ratio of non-notified tuberculosis deaths to total tuberculosis deaths is 2 to 32 or 6.25 per cent. In each case of a non-notified tuberculosis death, enquiries are made and the particulars forwarded to the County Medical Officer of Health.

The efficiency of notifications of tuberculosis in the area seems satisfactory, and there is no evidence to suggest any cases of wilful neglect or refusal to notify.

6. *Disinfection.*

Disinfection is carried out, without charge, in all cases of notifiable infectious disease and also after the removal or death of tuberculosis patients: moreover, after cases of cancer and after a number of other non-notfiable diseases disinfection is employed.

The methods used are unaltered, formalin disinfection for rooms, and steam disinfection for the bedding; the number of rooms disinfected was 204, and the number of lots of bedding disinfected was 249.

Probably disinfection has a certain value, especially psychologically; but much of the value depends on the subsequent household cleaning, with plenty of soap and water, distempering or re-papering where necessary, which are as effective. It is indeed taking a long time for a realisation that the words of Burton in his "Anatomy of Melancholy" are profoundly true—of infectious disease as of other things—"The greatest enemy to man is man."

BOROUGH OF TORQUAY

Torquay Riparian Authority

REPORT 1937

STAFF.

Medical Officer of Health.
J. V. A. SIMPSON,
M.D.LOND., B.S., M.R.C.S., L.R.C.P., D.P.H.CAMB.

Deputy Medical Officer of Health.
L. G. ANDERSON, M.D.LIVERP., CH.B., D.P.H.LIVERP.

Chief Sanitary Inspector and Port Sanitary Inspector.
G. E. BODY, C.R.S.I. and Meat Cert.

District Sanitary Inspector and Assistant Port Sanitary Inspector.
A. THOMPSON, C.R.S.I.

Clerks.
W. H. NICKELS
P. H. BURGE
W. D. WHITE

(The work in connection with Port Health Administration is carried out by the above members of the Public Health Staff, in the course of the general Public Health Administration of the Borough).

BOROUGH OF TORQUAY.

PORT HEALTH ADMINISTRATION, 1937.

The following report is the record of Port Health Administration for the year 1937, detailed in form and sequence in accordance with the instructions of the Minister of Health contained in Memorandum 204/S.A.

I. AMOUNT OF SHIPPING ENTERING THE PORT DURING THE YEAR.

TABLE A.

	Number	Tonnage	Number Inspected		Number reported to be defective	Number of vessels on which defects were remedied	Number of vessels reported as having, or having had, during the voyage infectious disease on board.
			By the Medical Officer of Health	By the Sanitary Inspector			
Foreign—							
Steamers ..	12	15185	4	3	—	—	—
Motors ..	34	7812	1	37	—	—	—
Sailing ..	—	—	—	—	—	—	—
Fishing ..	35	490	—	12	—	—	—
Total ..	81	23487	5	52	—	—	—
Coastwise—							
Steamers .	155	29563	2	60	—	—	—
Motor ..	835	33552	5	38	—	—	1
Sailing ..	—	—	—	—	—	—	—
Fishing ..	730	3595	—	14	—	—	—
Total ..	1720	66710	7	112	—	—	1
Total—Foreign and Coastwise ..	1801	90197	12	164	—	—	1

II. CHARACTER OF TRADE OF PORT.

TABLE B.

(a) *Passenger Traffic during the year.*

This is not a port approved under the Aliens Order, 1920.

No. of Passengers	1st Class	2nd Class	3rd Class	Transmigrants
Inwards ..	—	—	—	—
Outwards ..	—	—	—	—

Tourist Traffic. During the year there were 6952 inward passengers and 6509 outward passengers on tourist trips, chiefly short journeys to the Dart or along the coast to Exmouth, Weymouth, etc. It also includes some passengers who landed for a few hours from two or three liners on tour calling in Torbay.

(b) *Cargo Traffic.*

Principal Imports. Coal, cement, timber and general.

Foreign Ports from which vessels arrive. Baltic Ports, Ghent, Roscoff, Delfzyl and St. Malo.

III. WATER SUPPLY.

(1) *Source of Supply for (a) the Port (b) Shipping.*

The town supply drawn direct from the main is the source of supply used.

(2) *Hydrants and Hosepipes. What precautions are taken against Contamination?*

These are flushed prior to use and inspected regularly by the Sanitary Inspector.

(3) *Number of water boats and their sanitary condition.*

There are no water boats.

IV. PORT SANITARY REGULATIONS, 1933.

(1) *Arrangements for dealing with Declarations of Health.*

Declarations of Health in the approved form are completed by the Master of the Vessel and handed to the Customs Official who, should occasion require it, communicates immediately with the Medical Officer of Health.

(2) *Boarding of vessels on arrival.*

All foreign and coastwise vessels are boarded and inspected by the Sanitary Inspector, and by the Medical Officer of Health if required; and a few vessels are inspected by the Medical Officer of Health or his Deputy as a routine.

(3) *Notification to the Authority of inward vessels requiring special attention (wireless messages, land signal stations, information from Pilots, Custom Officers, etc.)*

Arrangements are made with the Post Office for the transmission of wireless messages if required. None were received in 1937.

(4) *Mooring stations designated under Article 10.*

(a) Within the docks.
(b) Outside the docks.

In March, 1934, the Commissioners of Customs and Excise formally agreed to the establishment under Article 10 of a mooring station for ships arriving at Torquay between Buoys No. 11 and No. 19 in the Outer Harbour. The agreement is subject to the understanding that the mooring place referred to is for all ships unhealthy under the Regulations, that a standing exemption under Article 14 has been granted and that the Local Health Authority will meet the cost of conveying Customs Officers when boarding ships detained at the Mooring Station.

(5) *Particulars of standing exemptions from the provisions of Article 14.*

A standing exemption under Article 14 has been granted by the Medical Officer of Health in respect of ships with infectious diseases other than cholera, plague, yellow fever, typhus fever, smallpox and chicken-pox on board, and ships otherwise clean arriving from ports in areas listed under Article 11.

(6) *Experience of working Article 16.*

There has been no experience of this during 1937.

(7) *What, if any, arrangements have been made for :—*

(a) *Premises and waiting rooms for medical examinations.*

There are no premises specially designated for medical examinations, but there is an office at the harbour where such examinations may be made.

(b) *Cleansing and disinfection of ships, persons and clothing and other articles.*

The Authority is not competent to undertake the disinfection of ships which, when occasion arises, are referred to Plymouth for this purpose.

The cleansing of persons and the disinfection of clothing and other articles can be undertaken at the Isolation Hospital.

(c) *Premises for the temporary accommodation of persons for whom such accommodation is required for the purposes of the Regulations.*

No special premises have been designated for the temporary accommodation of persons, but should this become necessary, it might be provided at one of the Hospitals in the area.

(d) *Hospital accommodation available for Plague, Cholera, Yellow Fever, Smallpox and other infectious diseases.*

For smallpox cases the County Council have a central institution at Upton Pine, near Exeter. No special hospital accommodation is available for plague, cholera or yellow fever, except such as the Torquay Isolation Hospital could provide. There is a small special hospital at Dartmouth where cases might be sent by arrangement with the County Medical Officer of Health. Other infectious diseases would be dealt with at the Isolation Hospital.

(e) *Ambulance Transport.*

An adequate and efficient ambulance service is available with four motor ambulances for infectious and non-infectious cases.

(f) *Supervision of Contacts.*

This would be undertaken by the Medical Officer of Health, his Deputy, or by the Sanitary Inspector, according to the requirements of the particular case.

(8) *Arrangements for the bacteriological or pathological examination of rats for plague.*

No formal arrangements have been made, but the required examination would be carried out at the County Laboratories, Exeter (administered by the County Council).

(9) *Arrangements for other bacteriological or pathological examinations.*

Examinations under this heading would be made either at the Town Hall Laboratory, Torquay, or at the County Laboratory, Exeter. Special examinations (such as for leptospirosis, etc.) would be made at the Wellcombe Research Bureau, London.

(10) *Arrangements for the diagnosis and treatment of venereal disease among sailors under international arrangements.*

A venereal disease clinic is held at the Torbay Hospital, Torquay, where provision is made for diagnosis and treatment; in addition to the special clinics daily treatment is arranged for those cases needing it. The personnel of all ships are circulated with leaflets informing them of these facilities: and the booklet "A Doctor Speaks to Seamen" has also been distributed.

(11) *Arrangements for the interment of dead.*

There is a recently built and adequately equipped mortuary for infectious and non-infectious cases; and when built accommodation was provided in excess of that ordinarily anticipated, so that it would possibly meet the needs of any mishap by sea or on shore. The nearest crematorium is at Plymouth; but there was no death at the port in 1937.

TABLE C.

Cases of Infectious Sickness landed from Vessels

Disease	No. of Cases during the year		No. of Vessels concerned	Average No. of Cases for previous five years
	Passengers	Crew		
Measles ..	1	—	1	0.2

TABLE D.

Cases of Infectious Sickness occuring on Vessels during the voyage but disposed of prior to arrival.

Disease	No. of Cases during the year		No. of Vessels concerned	Average No. of Cases for previous five years
	Passengers	Crew		
—	—	—	—	—

No cases of plague, cholera, yellow fever, smallpox or typhus fever occurred on any vessel using the port, and no plague-infested rats were discovered.

V. MEASURES AGAINST RODENTS.

(1) *Steps taken for detection of rodent plague.*

(a) *In ships in the port.*

Enquiries are made from all Masters of Vessels using the port concerning the presence of rats, and, if present, of signs of unusual mortality among the rats. Owing to the small size of the vessels and of the nature of the cargo carried, it is extremely uncommon to find any evidence of rat infestation.

(b) *On quays, wharves, warehouses, etc., in the vicinity of the port.*

Regular inspection is made by the Sanitary Inspector and by the Ratcatcher, and any unusual signs are notified to the Medical Officer.

(2) *Measures taken to prevent the passage of rats between ships and the shore.*

Notice is given to each Master who must adopt these precautions in order to prevent the passage of rats between the ships and the shore, and in addition two notice boards have been placed on the quay; protectors must be fitted on hawsers (or hawsers to be frapped with canvas and freshly tarred each night to the satisfaction of the Sanitay Inspector), and gangways must be removed at night.

(3) *Methods of deratisation of*

(a) *Ships.*

Any ship requiring deratisation is referred to Plymouth for the necessary measures, and the next port of call of the vessel would be notified.

(b) *Premises in the vicinity of docks or quays.*

These premises are inspected regularly by the Sanitary Inspector and baits laid down, if required.

(4) *Measures taken for the detection of rat prevalence in ships and on shore.*

Systematic inspections are made, with special reference to the presence of rat excreta, rat runs, damage to food-stuffs, etc.

(5) *Rat-proofing.*

(a) *To what extent are docks, wharves, warehouses, etc., rat proof.*

The quays are of cement and there are concrete walls, with sheet zinc extensions below ground.

(b) *Action taken to extend rat-proofing.*

(i) *In ships.*

Masters are advised and regularly reminded of the necessity for storing food in containers which are rat-proof, and of the necessity for avoiding any collection of food refuse, etc., which might attract rats.

(ii) *On shore.*

The quays are of good construction, but emphasis is laid on adequate cleanliness and the avoidance of any accumulation of foodstuffs for rats. Where foodstuff is temporarily stored on the quays, it is placed in buildings which are rat-proof.

RATS DESTROYED DURING THE YEAR.

TABLE E.

(1) On Vessels

Number of Rats	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total in year
Black	-	-	-	-	-	-	-	-	-	-	-	-	-
Brown	-	-	-	-	-	-	-	-	-	-	-	-	-
Species not recorded	-	-	-	-	-	-	-	-	-	-	-	-	-
Examined ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Infected with plague	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE F.

(2) In Docks, Quays, Wharves and Warehouses

Number of Rats	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct	Nov.	Dec.	Total in year
Black	-	-	-	-	-	-	-	-	-	-	-	-	-
Brown	-	-	-	-	-	-	-	-	-	-	-	-	-
Species not recorded	-	-	-	-	-	-	-	-	-	-	-	-	-
Examined ..	-	-	-	-	-	-	-	-	-	-	-	-	-
Infected with plague	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE G.

Measures of Rat Destruction on Plague "infected" or "suspected" Vessels or Vessels from plague infected ports arriving in the Port during the year.

(1) Total number of such Vessels arriving	(2) Number of such Vessels fumigated by SO_2	(3) Number of Rats killed	(4) Number of such Vessels fumigated by HCN	(5) Number of Rats killed	(6) Number of such Vessels on which trapping, poisoning, etc., were employed	(7) Number of Rats killed	(8) Number of such Vessels on which measures of Rat destruction were not carried out.
—	—	—	—	—	—	—	—

TABLE H.

Deratisation Certificates and Deratisation Exemption Certificates issued during the year.

This table does not apply, as Torquay is not an approved port under Article 28 of the International Sanitary Convention, 1926.

VI. HYGIENE OF CREWS' SPACES.

TABLE J.

Classification of Nuisances

Nationality of Vessels	Number Inspected during the year	Defects of original construction	Structural defects through wear and tear	Dirt, vermin and other conditions prejudicial to health
British ..	112	—	—	—
Other Nations ..	48	—	—	—

VII. FOOD INSPECTION.

(1) *Action taken under the Public Health (Imported Food) Regulations, 1925, the Public Health (Imported Food) Amendment Regulations, 1933, the Public Health (Imported Milk) Regulations, 1926, and the Public Health (Preservatives, etc., in Food) Regulations, 1925 to 1927.*

No samples were taken; there is no importation of food, except a few cargoes of potatoes and onions from France.

During the year no food (including fish) was condemned or surrendered.

(2) *Shell Fish.*

Information respecting any shell-fish beds or layings within the jurisdiction of the P.H.A. stating whether they are in the opinion of the Medical Officer liable to pollution. Report of any action taken under the Public Health (Shell-fish) Regulations, 1934, or the Public Health (Cleansing of Shell-fish) Act, 1932.

There are no oyster or mussel beds within the jurisdiction of the Authority, and no action was taken under the above-mentioned Regulations or Act.

Some lobsters and crabs are caught locally by Torquay and Brixham boats; but there is no evidence to suggest that they are liable to pollution.

Any available information on the following points :—

(i) *The places to which shell-fish taken from layings in the district are sent to be marketed.*

There are no shell-fish layings in the area.

(ii) *The layings from which shell-fish (specifying the kinds of shell-fish) which may be marketed in the district, are derived.*

Lobsters and crabs are caught locally, and are disposed of in the district; small shell-fish such as oysters, cockles, winkles, etc., come by train from the London markets.

(3) *Number of Samples of Food examined by :—*

(a) *Bacteriologist.*

(b) *Analyst.*

No samples were taken for examination under either heading.

Section H.

MISCELLANEOUS.

(1) *Local Government and Other Officers' Superannuation Act.*

The duties of the Medical Officer of Health under this section include the medical examination of all newly appointed officers and servants entering the Corporation's service or coming into the scheme; he is also required to examine and report on any officer and servant after prolonged illness or after accident as to fitness or unfitness to return to service, and to examine and report on any cases who may be permanently unfit and who may have to be invalided on account of ill-health.

During the year the Medical Officer of Health carried out the necessary clinical examinations in 84 individual cases.

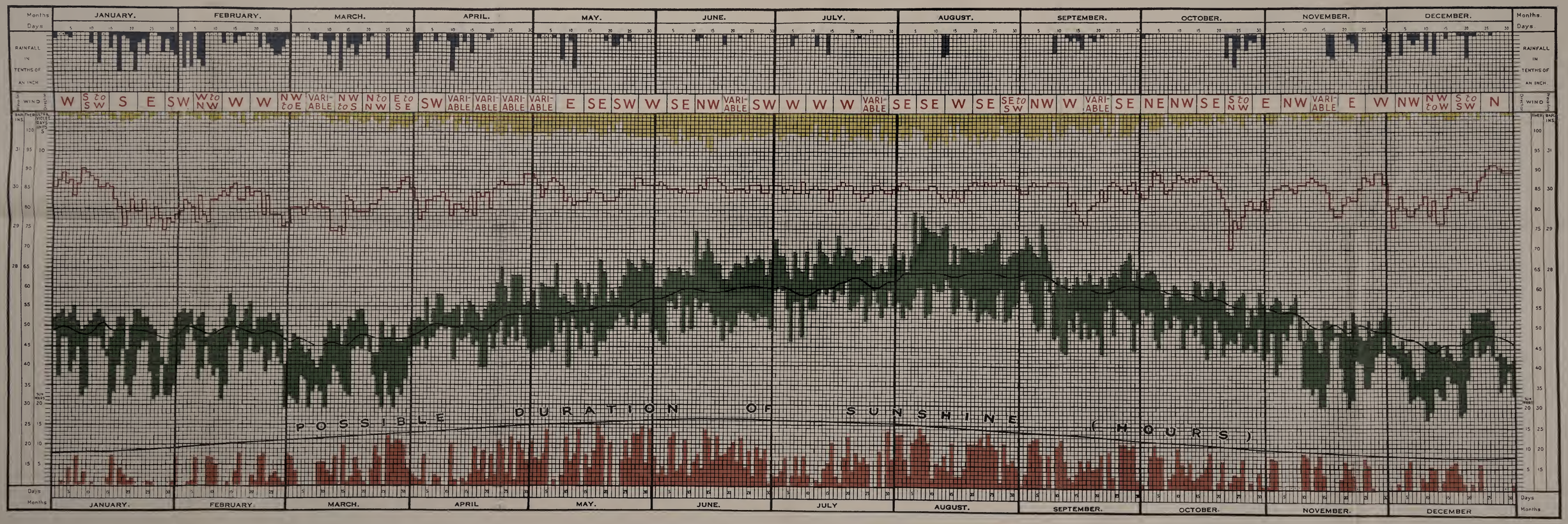
(2) *Air Raids Precautions.*

During the year, the work on Air Raids Precautions was continued, in which the Health Department co-operated; although under the recent Act the County Council is responsible for the general administration.

A course of instruction was held twice during the year on medical anti-gas training, arranged in accordance with the Home Office instructions; and the medical and nursing staff of the Health Department along with the local Medical and Nursing Professions took the course, and the majority entered for the examination and obtained the Home Office Certificate.

Borough of Torquay.

Chart shewing the Principal Meteorological Conditions during each day of the year 1937



RAINFALL
Each Square Equals One-Tenth of an Inch.
* denotes days with measurements from .006 to .05 inch

BAROMETRIC PRESSURE (reduced to 32° Fr and Sea Level)
(9 a.m.)

ULTRA-VIOLET RAYS

TEMPERATURE
Each Square Equals One Degree

SEA TEMPERATURE

SUNSHINE
Each Square Equals One Hour.
• denotes days with duration of 0.1 to 0.5 hour.

Dr. J. V. A. SIMPSON,
Medical Officer of Health,
Torquay.

(Form of Chart by courtesy of Dr. W. G. Willoughby, M.O.H., Eastbourne)

C. BELLINGER,
Borough Meteorologist,
Torquay.